		PRINTED CI	RCUIT BOARD REED RELAYS
RELAY SERIES	117SIP Magnecraft W117SIP-1 W0112	107DIP	171DIP
	L W H 0.290 x 0.280 x 0.750	L W H 0.275 X 0.300 X 0.750	L W H 0.275 X 0.300 X 0.750
	 SPST - NO OR NC - EPOXY MOLDED CONSTRUCTION. 	 SPST - NO OR NC - EPOXY MOLDED CONSTRUCTION. 	 SPST - NO OR NC - EPOXY MOLDED CONSTRUCTION.
	• STANDARD 0.1 GRID SPACING.	• STANDARD 0.1 GRID SPACING.	• STANDARD 0.1 GRID SPACING.
FEATURES	 AVAILABLE WITH OR WITHOUT SUPPRESSION DIODE ACROSS COIL. 	 4 HOOK- UP PINS TO COIL & 4 HOOK-UP PINS TO CONTACTS 	 AVAILABLE WITH OR WITHOUT SUPPRESSION DIODE ACROSS COIL.
		AVAILABLE WITH OPTIONAL ELECTROSTATIC SHIELD	AVAILABLE WITH OPTIONAL ELECTROSTATIC SHIELD
CONTACT DATA CONTACT CONFIGURATION:	SPST-N. O., SPST-N. C.	SPST-N. O., SPST-N. C.	SPST-N. O., SPST-N. C.
CONTACT MATERIAL:	RHODIUM	RHODIUM	RHODIUM
CONTACT RESISTANCE:	100 MILLIOHMS (INITIAL)	100 MILLIOHMS (INITIAL)	100 MILLIOHMS (INITIAL)
MAX. SWITCHING LOAD:	0.5 AMP, 200 VDC @ 10 VA	0.5 AMP, 100 VDC @ 10 VA	0.5 AMP, 100 VDC @ 10 VA
CONTINUOUS CARRY CURRENT:	1.2 AMP	1.5 AMP	1.5 AMP
COIL DATA STANDARD VOLTAGE DC:	5, 12, 24,	5, 12, 24,	5, 12, 24,
NOMINAL COIL POWER WATTS:	50 - 290 mW MAX.	35 - 290 mW MAX.	35 - 290 mW MAX.
		勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787	
		Http://www.100y.com.tw	
GENERAL DATA AMBIENT TEMPERATURE OPERATING:	- 45°C TO + 85°C	- 40°C TO + 85°C	- 40°C TO + 85°C
STORAGE:	- 40°C TO + 105°C	- 40°C TO + 105°C	- 40°C TO + 105°C
DIELECTRIC STRENGTH: (COIL TO FRAME)	500 V rms	1000 V rms	1000 V rms
LIFE EXPECTANCY ELECTRICAL: MECHANICAL:	50,000,000 OPERATIONS 100,000,000 OPERATIONS	50,000,000 OPERATIONS 100,000,000 OPERATIONS	50,000,000 OPERATIONS 100,000,000 OPERATIONS
PAGE NUMBER	PAGE 7	PAGE 8	PAGE 9 - 10
61	ERGE (FAGE 0	

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PRINTED CIRCUIT BOARD & MINIATURE REED RELAYS

Magnecrait	172DIP Magnecraft W172DIP 1470050Y	193RE
		a a a a a a a a a a a a a a a a a a a
L W H 0.275 X 0.300 X 0.750	L W H 0.275 X 0.300 X 0.750/0.338 X 0.393 X 0.750	L W H 0.355 X 0.4 TO 0.9 X 1.15
 SPST - NO - EPOXY MOLDED CONSTRUCTION 	 SPDT - EPOXY MOLDED CONSTRUCTION. DPDT - ENCAPSULATED CONSTRUCTION. 	 SPDT -NO, SPDT, DPST - NO & DPDT - DUST COVER STANDARD. ENCAPSULATED CONSTRUCTION
STANDARD 0.1 GRID SPACING	STANDARD 0.1 GRID SPACING.	OPTIONAL
DUAL OPERATE & RESET COIL	 AVAILABLE WITH SUPPRESSION DIODE ACROSS COIL. 	 STANDARD 0.1 GRID OR OPTIONAL 0.15 GRID SPACING.
 MAINTAINS LAST SET CONTACT POSITION WITHOUT THE NEED FOR COIL POWER 	 AVAILABLE WITH OPTIONAL ELECTROSTATIC SHIELD 	 UP TO 4PDT OR 6PST CONTACT ARRANGEMENTS.
SPST-N. O.	SPDT, DPDT	1 TO 4PDT, 1 TO 6PST
RHODIUM	RHODIUM	RHODIUM
100 MILLIOHMS (INITIAL)	100 MILLIOHMS (INITIAL)	200 MILLIOHMS (INITIAL)
0.5 AMP, 100 VDC @ 10 VA	SPDT: 0.25 AMP, 100 VDC @ 4 VA DPDT: 0.5 AMP, 100 VDC @ 10 VA	MAX. SWITCHING 0.5 AMP OR 200 VDC @ 10 VA
1.5 AMP	SPDT - 0.5 AMP, DPDT - 1.0 AMP	1,5 AMP
5, 12, 24,	5, 12, 24,	12, 24,
35 - 290 mW MAX.	35 - 290 mW MAX.	1030 mW MAX.
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- 40°C TO + 85°C	- 40°C TO + 85°C	- 40°C TO + 85°C
- 40°C TO + 105°C 1000 V rms	- 40°C TO + 105°C 1000 V rms	- 40°C TO + 105°C 500 V rms
1000 ¥ 11115		500 V IIIS
50,000,000 OPERATIONS 100,000,000 OPERATIONS	50,000,000 OPERATIONS 100,000,000 OPERATIONS	50,000 OPERATIONS 10,000,000 OPERATIONS
PAGE 11	PAGE 12 - 14	PAGE 15 - 16

		MINIATURE & HIGH VOLTAG	E REED RELAYS/COAXIAL RELAYS
RELAY SERIES	134 MPCX MERCURY WETTED	102VX & 102HVX	120 COAXIAL
	L W H 2.90 X 1.53 X 1.40	L W H 0.65 X 0.76 X 2.67	L W H 1.73 X 0.703 X 1.62
FEATURES	 SPDT & DPDT - DUST COVER STANDARD. ENCAPSULATED CONSTRUCTION OPTIONAL STANDARD 0.1 GRID OR OPTIONAL 0.15 SPACING AVAILABLE. POSITION SENSITIVE. VERTICAL MOUNTED. 	 SPST - NO EPOXY ENCAPSULATED HIGH VOLTAGE REED SWITCHING UP TO 10 MA @ 5,000 VDC 5 MA @10,000 VDC 	 SPDT - METAL CASE 150 WATT SWITCHING UP TO 470 MHz. RG58C/U CABLE, 12" LONG STANDARD. 50 OHM IMPEDANCE R.F. SWITCHING CONTACTS
CONTACT DATA CONTACT CONFIGURATION:	SPDT, DPDT	SPST- N. O.	SPDT
CONTACT MATERIAL:	RHODIUM / MERCURY	TUNGSTEN	SILVER ALLOY GOLD FLASHED
CONTACT RESISTANCE:	100 MILLIOHMS (INITIAL)	200 MILLIOHMS (INITIAL)	50 MILLIOHMS (INITIAL)
MAX. SWITCHING LOAD:	MAX. SWITCHING 1.0 AMP OR 500 VDC @ 50 VA	VX-10 MA @ 5000VDC HVX-5 MA @ 10,000 VDC	150 WATTS, 85 Vrms
CONTINUOUS CARRY CURRENT:		30 & 15 MILLIAMPS	150 WATTS
COIL DATA STANDARD VOLTAGE DC:	5, 12, 24,	12, 24,	12
NOMINAL COIL POWER WATTS:	620 mW MAX.	1.5 WATTS MAX. 勝特力材料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw	1.44 WATTS MAX.
GENERAL DATA AMBIENT TEMPERATURE OPERATING: STORAGE: DIELECTRIC STRENGTH: (COIL TO FRAME) LIFE EXPECTANCY ELECTRICAL: MECHANICAL:	- 37°C TO + 85°C - 40°C TO + 105°C 1000 V rms 40,000 OPERATIONS 10,000,000 OPERATIONS	- 40°C TO + 85°C - 40°C TO +105°C 12000 V rms 1,000,000 OPERATIONS 10,000,000 OPERATIONS	- 55°C TO + 65°C - 40°C TO +105°C 1500 V rms 5,000,000 OPERATIONS 100,000 OPERATIONS
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REED RELAYS

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APPLICATION DATA

HOW REED RELAYS WORK

The term reed relay covers dry reed relays and mercurywetted contact relays, all of which use hermetically sealed reed switches. In both types, the reeds (thin, flat blades) serve multiple functions - as conductor, contacts, springs, and magnetic armatures.

DRY REED RELAYS

Dry reed relays have become an important factor in the relay field. They have the advantage of being hermetically sealed and resistant to atmospheric contamination. They have fast operate and release times and when operated within their rated contact loads, have very long life. A typical dry reed switch capsule is shown in Figure 1.

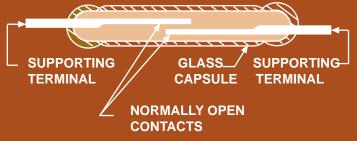


Figure 1. Construction of Switch Capsule of Typical Dry Reed switch (SPST-NO)

In the basic SPST-NO design, two opposing blades are sealed into a narrow glass capsule and overlapped at their free ends. The contact area is plated typically with rhodium to produce a low contact resistance when contacts are drawn together. The capsule is made of glass and filled with a dry inert gas and then sealed. The capsule is surrounded by an electromagnetic coil. When the coil is energized, the normally open contacts are brought together; when the coil voltage is removed, the blades separate by their own spring tension. Some reeds contain permanent magnets for magnetic biasing to achieve normally closed contacts (SPST-NC) or SPDT contact combinations. The current rating, which is dependent upon the size of the blade and the type and amount of plating, may range from low level to 1 amp. Effective contact protection is essential when switching loads other then dry resistive loads.

MERCURY-WETTED CONTACT RELAYS.

Mercury wetted contacts consist of a glass-encapsulated reed with its base immersed in a pool of mercury and the other end capable of moving between one or two stationary contacts. The mercury flows up the reed by capillary action and wets the contact surfaces of the moving end of the reed as well as the contact surfaces of the stationary contacts. A mercury to mercury contact is maintained in the closed position. The capsule is surrounded by an electromagnetic coil and operates in the same manner as a dry reed.

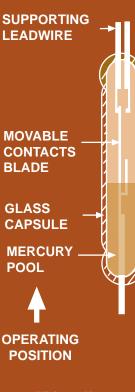


Figure 2. Miniature Mercury wetted contacts switch (SPST)

CONTACT COMBINATIONS.

Mercury wetted contacts are fast in operation and have relatively good load carrying capacity and long life. The mercury films are reestablished at each contact closure and contact erosion is eliminated. The mercury films are stretchable, there is no contact bounce and because it is a mercury contact, the contact resistance is very low and ideal for low level switching applications. The disadvantages of this type of reed relay are the freezing point of mercury (-38°C), poor resistance to shock and vibration and the need to mount the relay in a near vertical position. These relays are used for a variety of switching applications such as found in computers, business machines, machine tool control systems, and laboratory instruments.

The switches used in dry reed relays provide SPST-NO, SPST-NC, SPDT contact combinations. The SPST-NO corresponds with the basic switch capsule design (Fig.1).

The SPST-NC results from a combination of the SPST-NO switch and a permanent magnet strong enough to pull the contacts closed but able to open when coil voltage is applied to the relay coil.

In typical true SPDT designs, the armature is mechanically tensioned against the normally closed contact, and is moved to the normally open contact upon application of a magnetic field. The SPDT contact combination can also be achieved by joining a SPST-NO switch with an appropriately adjusted SPST-NC switch, and jumping one side of both switches together to form the movable contact system.

Latching contacts, defined as contacts which remain in the position to which they were driven, and stay in that position when coil power is removed from the relay coil.

Latching switches are manufactured by using a SPST-NO contact, and biasing it with a permanent magnetic that is strong enough to hold the contacts closed, but not strong enough to hold the contact closed when coil power is applied to the coil. The switching process is than reversed by simply reversing the relay coil polarity to close the switch, or by employing a second coil with a reverse field.

REED RELAYS

APPLICATION DATA

MAGNETIC FIELDS

Reed relays in general can be characterized as susceptible to the influences of external magnetic fields. It is important to keep reed relays at a proper distance from each other because of the possibility of magneticinteraction between them. Proper magnetic shielding must be used to contain stray magnetic fields. When installing reed relays into equipment, one should be aware of the devices within that equipment which can produce magnetic fields. The relays being installed into that equipment should be positioned as far away as possible from any stray magnetic fields and should be shielded to prevent false operations.

ELECTRICAL CHARACTERISTICS

SENSITIVITY:

The input power required to operate dry reed relays is determined by the sensitivity of the particular reed switch used, by the number of switches operated by the coil, by the permanent magnet biasing (if used), and the efficiency of the coil and the effectiveness of its coupling to the blades. Minimum input required to effect closure ranges from the very low milliwatt level for a single sensitive capsule to several watts for multipole relays.

OPERATE TIME:

The coil time constant, overdrive on the coil, and the characteristics of the reed switch determine operate time. With the maximum overdrive voltage applied to the coil, reed relays will operate in approximately the 200 microsecond range. When driven at rated coil voltage, usually the relays will operate at about one millisecond.

RELEASE TIME:

With the coil unsuppressed, dry reed switch contacts release in a fraction of a millisecond. SPST-NO contacts will open in as little as 50 microseconds. Magnetically biased SPST-NC and SPDT switches reclose from 100 microseconds to 1 millisecond respectively. If the relay coil is suppressed, release times are increased. Diode suppression can delay release times for several milliseconds, depending on coil characteristics, coil voltage, and reed release characteristics.



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CONTACT BOUNCE

Dry reed contacts bounce on closure as with any other hard contact relay. The duration of bounce on a Dry reed switch is typically very short, and is in part dependent on drive level. In some of the faster devices, the sum of the operate time and bounce is relatively constant. As drive is increased, the operate time decreases with bounce time increasing. The normally closed contacts of a SPDT switch bounce more then the normally open contacts. Magnetically biased SPST-NC contacts exhibit essentially the same bounce characteristics as SPST-NO switches.

CONTACT RESISTANCE

The reeds (blades) in a dry reed switch are made of magnetic material which has a high volume resistivity, terminal-to-terminal resistance is somewhat higher than in some other types of relays. Typical specification limits for initial resistance of a SPST-NO reed relay is 0.200 ohms max (200 milliohms).

INSULATION RESISTANCE

A dry reed switch made in a properly controlled internal atmosphere will have an insulation resistance of 10¹² 100 mms or greater. When it is assembled into a to relay, parallel insulation paths reduce this to typical values 10 hms. Depending on the particular manner of of relay construction, exposure to high humidity or contaminating environments can appreciably lower final insulation resistance.

CAPACITANCE

Reed capsules typically have low terminal-to-terminal capacitance. However, in the typicall relay structure where the switch is surrounded by a coil, capacitance from each reed to the coil act to increase capacitance many times. If the increased capacitance is objectionable, it can be reduced by placing a grounded electrostatic shield between the switch and coil.

DIELECTRIC WITHSTAND VOLTAGE

With the exception of the High-Voltage dry reed switches (capsules that are pressurized or evacuated), the dielectric strength limitation of relays is determined by the ampere turn sensitivity of the switches used. A typical limit is 200 VAC. The dielectric withstand voltage between switch and coil terminals is typically 500 VAC.

REED RELAYS

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THERMAL EMF

Since thermally generated voltages result from thermal gradients within the relay assembly, relays built to minimize this effect often use sensitive switches to reduce required coil power, and thermally conductive materials to reduce temperature gradients. Latching relays, which may be operated by a short duration pulse, are often used if the operational rate is not changed for longer periods of time because coil power is not required to keep the relay in the on or off position after the initial turn on or turn off pulse.

NOISE

Noise is defined as a voltage appearing between terminals of a switch for a few milliseconds following closure of the contacts. It occurs because the reeds (blades) are moving in a magnetic field and because voltages are produced within them by magnetostrictive effects. From an application standpoint, noise is important if the signal switched by the reed is to be used within a few milliseconds immediately following closure of the contacts. When noise is critical in an application, a peak-to-peak limit must be established by measurement techniques, including filters which must be specified for that particular switching application.

ENVIRONMENTAL CHARACTERISTICS

Reed relays are used in essentially the same environments as other types of relays. Factors influencing their ability to function would be temperature extremes beyond specified limits

VIBRATION

The reed switch structure, with so few elements free to move, has a better defined response to vibration than other relay types. With vibration inputs reasonably separated from the resonant frequency, the reed relay will withstand relatively high inputs, 20 g's or more. At resonance of the reeds, the typical device can fail at very low input levels. Typical resonance frequency is 2000 hz.

SHOCK

Dry reed relays will withstand relatively high levels of shock. SPST-NO contacts are usually rated to pass 30 to 50 g's, 11 milliseconds, half sign wave shock, without false operation of contacts. Switches exposed to a magnetic field that keep the contacts in a closed position, such as in the biased latching form, demonstrate somewhat lower resistance to shock. Normally closed contacts of mechanically biased SPDT switches may also fail at lower shock levels.

APPLICATION DATA

TEMPERATURE

Differential expansion or contraction of reed switches and materials used in relay assemblies can lead to fracture of the switches. Reed relays are capable of withstanding temperature cycling or temperature shock over a range of at least -50 °C to + 100 °C. These limits should be applied to the application to prevent switch failure.

CONTACT PROTECTION

Tungsten lamp, inductive and capacitive discharge load are extremely detrimental to reed switches and reduce life considerably. Illustrated below are typical suppression circuits which are necessary for maximum contact life.



Figure 3

Initial cold filament turn-on current is often 16 times higher than the rated operating current of the lamp. A current limiting resistor in series with the load, or a bleeder resistor across the contacts will suppress the inrush current. The same circuits can be used with capacitive loads, as shown in Figure 3.



Figure 4

DC inductive loads call for either a diode or a thyristor to be placed across the load. These circuits are necessary to protect the contacts when inductive loads are to be switched in a circuit, as shown in Figure 4.

U. S. A.

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FAX:	(843)393-4123		
WEBSITE:	www.magnecraft.com		
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EUROPE

TELEPHONE: 4989 / 75080310	
FAX: 4989/7559344	
WEBSITE: www.magnecraft.c	om
EMAIL: renatesteinback@i	magnecraft.de

SINGLE IN - LINE PACKAGE REED RELAY

SPST-N.O. OR N.C., 0.5 AMP

GENERAL SPECIFICATIONS

COIL

Pull-in Voltage:	85% of nominal voltage or less
Drop Out Voltage:	10% of nominal voltage or more
Max. Voltage:	110% of nominal voltage
Resistance:	±10% measured @ 25°C
Coil Power:	See chart
Duty:	Continuous

CONTACTS

Contact Material:	Rhodium
Contact Resistance:	200 milliohms max
Contact Rating:	0.5 amp 200 VDC (10VA)
	1.2 amps max. Continuous carry current
TIMING	
Operate time:	1 mS or less @ nominal voltage

Release time: 1 mS or less @ nominal voltage

DIELECTRIC STRENGTH

Across Open Contacts:	150 V rms
Between Mutually	
Insulation Points:	500 V rms
Insulation Resistance:	1000 megohms min. @ 500 VDC
Capacitance:	1.0 pf typical coil to contact

TEMPERATURE

Operating: Storage:

-40°C to +85°C @ rated operation -40°C to +105°C

SHOCK RESISTANCE

Operating:

VIBRATION RESISTANCE

Operating:

50,000,000 operations
@ 5-10 V @ 10 mA
100,000,000 operations @ no load

20 g's, 40 Hz to 200 Hz

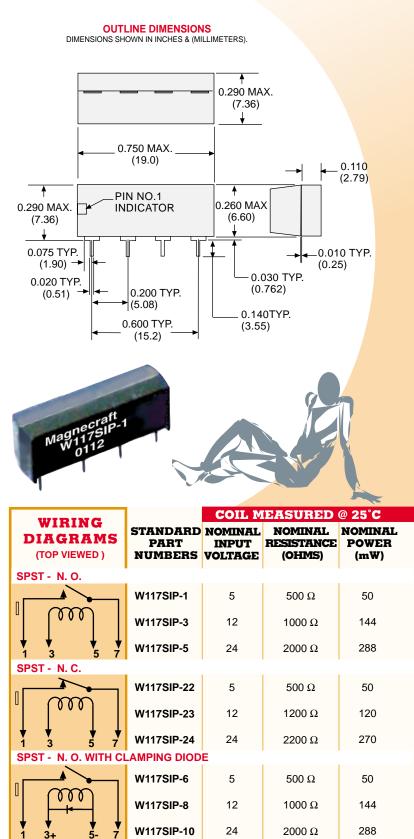
50 g's

MISCELLANEOUS

Operating Position:	Any
Enclosure:	Epoxy molded
Weight:	1 gram approx.
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> WHEN SPACING SIP RELAYS, THE RELAYS **REQUIRE 1/2 INCH SPACING FROM THE SIDE** OF THE ADJACENT RELAYS.



5

12

24

500 Ω

1200 Ω

2200 Ω

50

120

220

SPST - N. C. WITH CLAMPING DIODE

7

5-

000

3+

W117SIP-18

W117SIP-25

W117SIP-26



SPST-N.O., 0.5 AMP

OUTLINE DIMENSIONS DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).

14

GENERAL SPECIFICATIONS

COIL

Pull-in Voltage: Drop Out Voltage: Max. Voltage: Resistance: Coil Power: Duty:

CONTACTS

85% of nominal voltage or less 10% of nominal voltage or more 110% of nominal voltage ±10% measured @ 25°C See chart Continuous

Contact Material:	
Contact Resistance:	
Contact Rating:	

Rhodium 200 milliohms max. 0.5 amp 100 VDC (10VA) 1.5 amps max. Continuous carry current.

1 mS or less @ nominal voltage.

1 mS or less @ nominal voltage.

TIMING

Operate time: Reset time:

DIELECTRIC STRENGTH

Across Open Contacts: 200 V rms **Between Mutually** Insulation Points: Insulation Resistance: Capacitance:

1000 V rms 1000 megohms min. @ 500 VDC

2.0 pf typic	al contact	to open	contact

-40°C to +85°C @ rated operation

-40°C to +105°C

50 g's

TEMPERATURE

Operating: Storage:

SHOCK RESISTANCE

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LIFE EXPECTANCY

VIBRATION RESISTANCE

Electrical:

Operating:

Operating

Mechanical:

@ 5-10 V @ 10 mA

MISCELLANEOUS

Operating Position: Enclosure: Weight:

50,000,000 operations

20 g's, 40 Hz to 200 Hz

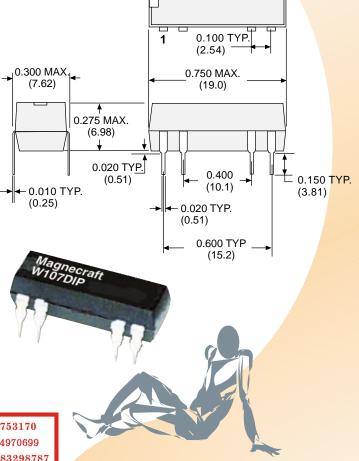
100,000,000 operations @ no load

Any

Epoxy molded 1 gram approx.

WIRING		COIL	MEASURED	@ 25
(TOP VIEWED)	STANDARD PART NUMBERS	INPUT	NOMINAL RESISTANCE (OHMS)	NOMI POW (mV
SPST - N.O.				
	W107DIP-1 W107DIP-3	5 12	500 Ω 1000 Ω	50 144
	W107DIP-4	24	2000 Ω	288
SPST - N. O. WITH C	LAMPING DIOL)E		
	W107DIP-5	5	500 Ω	50
	W107DIP-7	12	1000 Ω	144
	W107DIP-8	24	2000 Ω	288

WHEN SPACING DIP RELAYS, THE RELAYS **REQUIRE 1/2 INCH SPACING FROM THE** SIDE OF THE ADJACENT RELAYS.



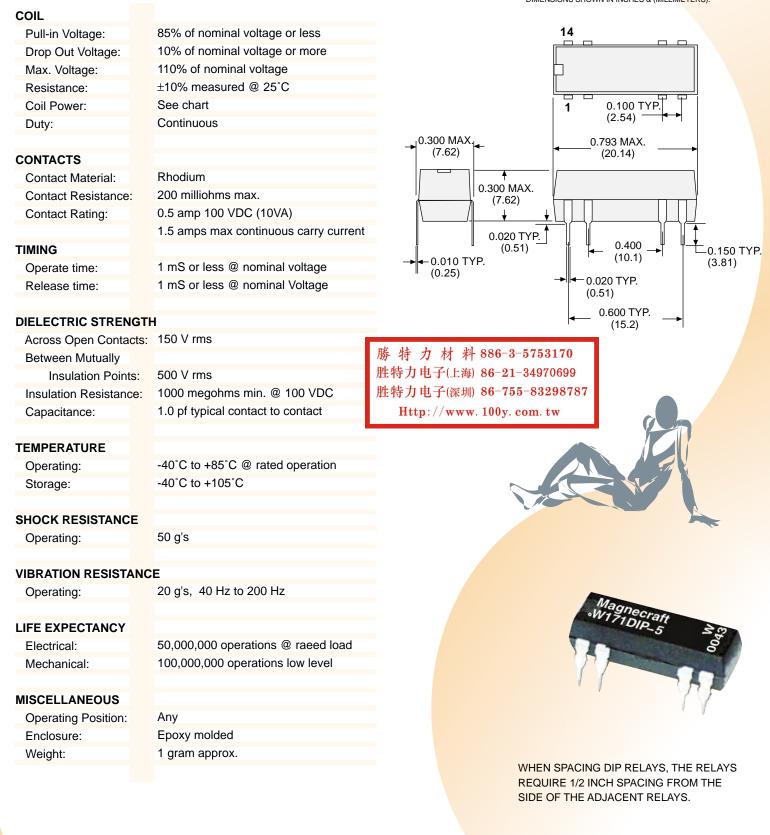
	DIAGRAMS (TOP VIEWED)	STANDARD PART NUMBERS	INPUT	NOMINAL RESISTANCE (OHMS)	NOMINAL POWER (mW)
	SPST - N.O.				
	14 13 9 8 ▲ ▲ ▲ ▲	W107DIP-1	5	500 Ω	50
		W107DIP-3	12	1000 Ω	144
		W107DIP-4	24	2000 Ω	288
	1 2 6 7				
	SPST - N. O. WITH C		DE		
	14 13 9 8				
		W107DIP-5	5	500 Ω	50
	1 000	W107DIP-7	12	1000 Ω	144
S		W107DIP-8	24	2000 Ω	288

SEE END OF SECTION 6 FOR CROSS REFERENCE

SPST-N.O. OR N.C., DPST-N.O. 0.5 AMP

GENERAL SPECIFICATIONS

OUTLINE DIMENSIONS DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).



SPST-N.O. OR N.C., DPST-N.O. 0.5 AMP



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		D @ 25°C		
WIRING DIAGRAMS (TOP VIEWED)	STANDARD PART NUMBERS	NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS)	NOMINAL POWER (mW)
SPST - N.O.				
	W171DIP-2	5	500 Ω	50
	W171DIP-4	12	1200 Ω	120
	W171DIP-5	24	2200 Ω	270
SPST - N. O. WITH C	LAMPING DIODI	E		
14 13 9 8				
	W171DIP-7	5	500 Ω	50
	W171DIP-9	12	1000 Ω	144
1 + 2 = 6 = 7	W171DIP-10	24	2200 Ω	270
SPST - N. C.				
14 13 9 8	W171DIP-12	5	200 Ω	50
	W171DIP-14	12	1200 Ω	120
	W171DIP-15	24	2200 Ω	270
SPST - N. C. WITH C		Ξ		
14 13 9 8	W171DIP-17	5	500 Ω	50
		-		
	W171DIP-19	12	1200 Ω	120
	W171DIP-20	24	2200 Ω	270
DPST - N. O.				
14 13 9 8				
A AA A A	W171DIP-21	5	500 Ω	50
	W171DIP-23	12	1000 Ω	144
$\downarrow \downarrow \downarrow \downarrow \downarrow$	W171DIP-24	24	2200 Ω	270
1 2 6 7 DPST - N. O. WITH C	LAMPING DIODI	E		
14 13 9 8				
	W171DIP-25	5	500 Ω	50
	W171DIP-27	12	1000 Ω	144
1 + 2 = 6 = 7	W171DIP-28	24	2200 Ω	270

SEE END OF SECTION 6 FOR CROSS REFERENCE

DUAL COIL LATCHING REED RELAY

SPST - N.O., 0.5 AMP

GENERAL SPECIFICATIONS

OUTLINE DIMENSIONS DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).

COIL						
Pull-in Voltage:	85% of nominal voltage or less		1	4		
Drop Out Voltage:	10% of nominal voltage or more					
Max. Voltage:	110% of nominal voltage		L. L.			
Resistance:	±10% measured @ 25°C					
Coil Power:	See chart			1 0.100 T (2.54)	YP. ■	
Duty:	Continuous					
,		→ 0.300 M (7.62		0.793 MAX (20.14)	·	
CONTACTS		(***=		(20.14)		
Contact Material:	Rhodium		0.300 MAX.			
Contact Resistance:	200 milliohms max		(7.62)		<u>/</u>	
Contact Rating:	0.5 amp 100 VDC (10VA)			∖└─\/────		
, i i i i i i i i i i i i i i i i i i i	1.5 amps max continuous carry of	current	0.020 TY <u>P.</u>	0.400		
TIMING		→ ← 0.010	0.51) TYP	(10.1)	→ 0.15 (3.8	0 TYP.
Operate time:	1 mS or less @ nominal voltage	(0.25		- 0.020 TYP.	(3.0	')
Release time:	1 mS or less @ nominal Voltage			(0.51)		
					00 TYP.	
DIELECTRIC STREN	GTH		Na		(15.2)	
Across Open Contac	cts: 150 V rms	n	MRDI	_		
Between Mutually		2.05				
Insulation Points	s: 500 V rms		- Carate	- 1 C		
Insulation Resistanc	e: 1000 megohms min. @ 100 VDC	; 77				
Capacitance:	1.0 pf typical contact to contact					
TEMPERATURE					1	
Operating:	-40°C to +85°C @ rated operatio	n				
Storage:	-40°C to +105°C					
SHOCK RESISTANC	E					
Operating:	50 g's					
					_	
VIBRATION RESISTA	NCE	勝。	持力材料 886-	3-5753170		
Operating:	20 g's, 40 Hz to 200 Hz		力电子(上海) 86-2	1-34970699		
			力电子(深圳) 86-7			
LIFE EXPECTANCY			Http://www.100y			
Electrical:	50,000,000 operations					
	@ rated load			COIL	MEASURED	@ 25°C
Mechanical:	100,000,000 operations	WIRING	STANDARD	NOMINAL	NOMINAL	NOMINAL
	low level	DIAGRAMS (TOP VIEWED)	PART	INPUT	RESISTANCE	POWER
MISCELLANEOUS		SPST - N. O.	NUMBERS	VOLTAGE	(OHMS)	(mW)
Operating Position:	Any	RESET				
Enclosure:	Epoxy molded	14 13 9 8				
Weight:	1 gram approx.	│ ↑ ┌_{──}┥ ↑ ↑	MRRDL1AS8-5D	5	750 / 750 Ω	35
			MRRDL1AS8-12D	12	1000 / 1000 Ω	145
				12	10007 1000 22	110
		<u>مق</u>	MRRDL1AS8-24D	24	4600 / 4600 Ω	125
N N	WHEN SPACING LATCHING DIP RELAYS	S, ↓ ↓ ↓ ↓				
	THE RELAYS REQUIRE 1 INCH SPACING					
	BETWEEN ADJACENT RELAYS FROM	OPERATE				
· ·	END TO END.					



SPDT, 0.25 AMP

GENERAL SPECIFICATIONS

COIL

Pull-in Voltage: Drop Out Voltage: Max. Voltage: Resistance: Coil Power: Duty:

85% of nominal voltage or less 10% of nominal voltage or more 110% of nominal voltage ±10% measured @ 25°C See chart Continuous

CONTACTS

Contact Material: Contact Resistance: Contact Rating:

Rhodium 200 milliohms max 0.25 amp 100 VDC (4 VA) 0.5 amps max continuous carry current

TIMING

Operate time: Release time: 1 mS or less @ nominal voltage 1 mS or less @ nominal Voltage

DIELECTRIC STRENGTH

Across Open Contacts: 1000 V rms **Between Mutually** Insulation Points: Insulation Resistance: Capacitance:

500 V rms 1000 megohms min. @ 100 VDC

TEMPERATURE

Operating: Storage:

-40°C to +85°C @ rated operation -40°C to +105°C

1.0 pf typical coil to contact

SHOCK RESISTANCE

Operating:

VIBRATION RESISTANCE 20 g's, 40 Hz to 200 Hz

50 g's

LIFE EXPECTANCY

Electrical:

Mechanical:

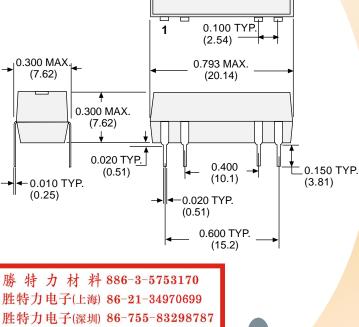
Operating:

50,000,000 operations @ 50V/50mA 80,000,000 operations low level 10V/10mA

MISCELLANEOUS

Operating Position: Enclosure: Weight:

Any Epoxy molded 1 gram approx.



14

OUTLINE DIMENSIONS DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).

Http://www. 100y. com. tw



WHEN SPACING DIP RELAYS. THE RELAYS **REQUIRE 1/2 INCH SPACING FROM THE** SIDE OF THE ADJACENT RELAYS.



SPDT, 0.25 AMP

勝特力材料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw



勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw



		COIL	MEASURED	@ 25°C
WIRING DIAGRAMS (TOP VIEWED)	STANDARD PART NUMBERS	NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS)	NOMINAL POWER (mW)
SPDT				
14 13 9 8				
	W172DIP-1	5	200 Ω	125
	W172DIP-3	12	500 Ω	300
$\begin{array}{c} \begin{array}{c} 0 \\ 0 \\ 1 \end{array} \\ \begin{array}{c} 2 \\ 2 \end{array} \\ \begin{array}{c} 0 \\ 0 \\ 0 \end{array} \\ \begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \end{array} \\ \begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \end{array} \\ \begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} \\ \begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} \\ \begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 $	W172DIP-4	24	2200 Ω	270
SPDT WITH CLAMPIN	G DIODE			
	W172DIP-5	5	200 Ω	125
	W172DIP-7	12	500 Ω	300
$ \begin{array}{c} $	W172DIP-8	24	2200 Ω	270
SPDT				
14 13 9 8				
	W172DIP-31	5	200 Ω	125
	W172DIP-33	12	500 Ω	290
	W172DIP-34	24	2200 Ω	270
SPDT WITH CLAMPIN	G DIODE			
	W172DIP-35	5	200 Ω	125
	W172DIP-37	12	500 Ω	290
	W172DIP-38	24	2200 Ω	270
1 + 2 6 7 SPDT				
14 13 9 8				
<u>+</u> + ↑	W172DIP-141	5	200 Ω	125
	W172DIP-145	12	1000 Ω	144
	W172DIP-146	24	3200 Ω	180
SPDT WITH CLAMPIN	G DIODE			
	W172DIP-147	5	200 Ω	125
	W172DIP-149	12	1000 Ω	144
	W172DIP-150	24	3200 Ω	180

SEE END OF SECTION 6 FOR CROSS REFERENCE

DPDT, 1.0 AMP

GENERAL SPECIFICATIONS

COIL

Pull-in Voltage: Drop Out Voltage: Max. Voltage: Resistance: Coil Power: Duty:

85% of nominal voltage or less 10% of nominal voltage or more 110% of nominal voltage ±10 % measured @ 25°C See chart Continuous

CONTACTS

Contact Material:	Rhod
Contact Resistance:	200 n
Contact Rating:	0.25

Rhodium 200 milliohms max. 0.25 amp 100 VDC (4 VA) 0.5 amps max continuous carry current.

TIMING

Operate time: Release time: 1 mS or less @ nominal voltage. 1 mS or less @ nominal Voltage.

DIELECTRIC STRENGTH

Across Open Contacts:1000 V rmsBetween MutuallyInsulation Points:500 V rmsInsulation Resistance:1000 megohms min. @ 100 VDCCapacitance:1.0 pf typical coil to contact

TEMPERATURE

Operating: Storage: -40°C to +85°C @ rated operation -40°C to +105°C

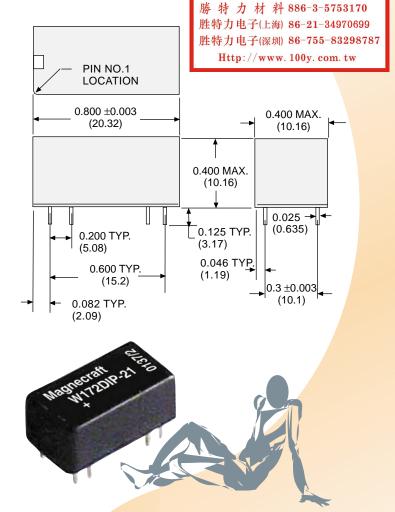
SHOCK RESISTANCE

Operating:

50 g's

COIL MEASURED WIRING VIBRATION RESISTANCE NOMINAL STANDARD NOMINAL DIAGRAMS PART INPUT RE SISTANCE Operating: 20 g's, 40 Hz to 200 Hz (TOP VIEWED) NUMBERS VOLTAGE (OHMS) DPDT LIFE EXPECTANCY 14 13 Electrical: 50,000,000 operations W172DIP-17 46 Ω 5 @ rated load Mechanical: 100,000,000 operations W172DIP-19 12 266 Ω low level 0 1066 Ω W172DIP-20 24 MISCELLANEOUS **Operating Position:** Any 6 7 Enclosure: Epoxy molded **DPDT WITH CLAMPING DIODE** Weight: 1 gram approx. W172DIP-21 5 46 Ω W172DIP-23 **266** Ω 12 ð W172DIP-24 **1066** Ω 24 WHEN SPACING DUAL IN - LINE REED RELAYS, THE RELAYS REQUIRE 1/2 INCH SPACING FROM THE SIDE OF THE ADJACENT RELAYS. SEE END OF SECTION 6 FOR CROSS REFERENCE PHONE: (843) 393-5778 FAX: (843) 393-4123 EMAIL: info@magnecraft.com

OUTLINE DIMENSIONS DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).



@ 25°C

NOMINAL

POWER

(mW)

540

540

540

540

540

540



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DRY MINIATURE REED RELAYS

OUTLINE DIMENSIONS DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).

0.125 TYP.

PIN SPACING OF 0.100" IS STANDARD. PIN SPACING OF 0.150 ISAVAILABLE ON SPECIAL ORDER. ALSO AVAILABLE ARE MODELS WITH ELECTROSTATIC SHIELDS. CONSULT FACTORY FOR PART NUMBERS. NONSTANDARD SCHEMATICS AND PIN-OUTS CAN ALSO BE PRODUCED FOR SPECIFIC CUSTOMER REQUIREMENTS.

SPDT - NO, SPDT, DPST-NO, DPDT, 0.5 AMP

¥

0.355 MAX.

1.15 MAX.

(29.2)

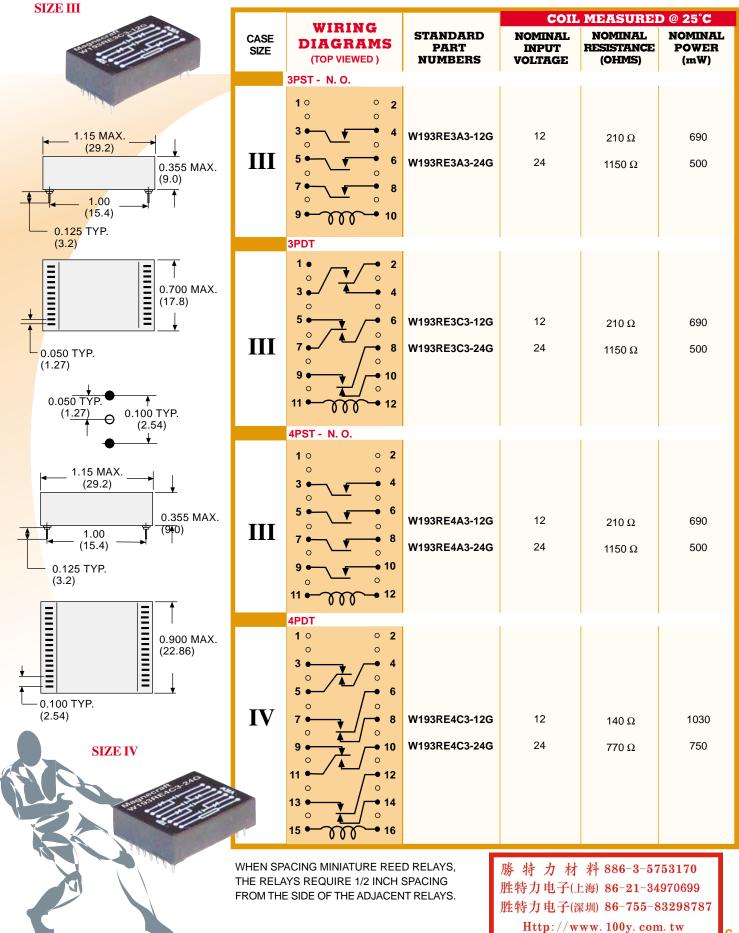
			0	.125 TYP. (3.2)		(9.0)	
GENERAL S	PECIFICATIONS		SIZE I		1.00 (15.4)		
COIL							
Pull-in Voltage:	85% of nominal voltage or less					0.400 N (10.16)	IAX.
Drop Out Voltage:	10% of nominal voltage or more			Ţ [—]			
Max. Voltage:	110% of nominal voltage) TYP. 27)	I	
Resistance:	±10 % measured @ 25°C		SIZE II		_,		
Coil Power:	See chart		or 21. 2-120				
Duty:	Continuous		PARSONAL PARSON			0.500 N (12.7)	IAX.
			And the second				
CONTACTS) TYP. 54)		
Contact Material:	Rhodium			(_ .	01)		
Contact Resistance:	200 milliohms max.		0	.050 TYP.	<u> </u>		
Contact Rating:	10 VA -SPST - NO. & SPDT		Spacing between) TYP. 54)	0	-
	4 VA -DPST - NO. & DPDT		filled in circles in		<u> </u>		
	0.5 amps max continuous carry current.		schematics are on	•			
TIMING			0.100 grid patterns. Pin omitted on				
Operate time:	1 mS or less @ nominal voltage.		unfilled circles.				
Release time:	1 mS or less @ nominal Voltage.						4
			WIRING		COIL N	IEASURED	@ 25°C
DIELECTRIC STRENG		CASE		STANDARD	NOMINAL	NOMINAL	NOMINAL
Across Open Contacts	: 1000 VDC	SIZE	(TOP VIEWED)	PART NUMBERS	INPUT VOLTAGE	RESISTANCE (OHMS)	POWER (mW)
Between Mutually Insulation Points:			SPST - N. O.				. ,
Insulation Resistance:	1000 VDC		1 0 0 2				
Capacitance:	0	-	0 0	W193RE1A3-12G	12	420 Ω	350
Capacitance.	3 pf typical coil to contact	Ι		W193RE1A3-24G	24	2300 Ω	250
TEMPERATURE			5 6				
Operating:	-40°C to +85°C @ rated operation		SPDT				
Storage:	-40°C to +105°C						
otorago.				W193RE1C3-12G	12	420 Ω	350
SHOCK RESISTANCE		т	3 • • 4	W193RE1C3-24G	24	2300 Ω	250
Operating:	50 g's	I	5 • • • • • 6				
- p			000				
VIBRATION RESISTAN	CE		DPST - N. O.				
Operating:	20 g's, 40 Hz to 200 Hz		1 o o 2			000 G	
	5 /		$3 \stackrel{\circ}{\longleftarrow} \stackrel{\circ}{\checkmark} 4$	W193RE2A3-12G	12	280 Ω	500
		Π	5 - 6	W193RE2A3-24G	24	1500 Ω	390
Electrical:	10,000,000 operations @ rated load						
Mechanical:	100,000,000 operations @ no load		7				
			DPDT				
MISCELLANEOUS				W193RE2C3-12G	12	280 Ω	500
Operating Position:	Any						
Enclosure:	Epoxy encapsulated	II	5 • 6	W193RE2C3-24G	24	1500 Ω	390
Weight:	1 gram approx.						
			(• • °				

6....15

^{CLASS}193

DRY MINIATURE REED RELAYS

3PST-N.O. 4PST- N.O, 3PDT & 4PDT., 0.5 AMP



^{CLASS}134

MERCURY REED RELAYS

SPDT & DPDT, 2 AMP

OUTLINE DIMENSIONS

DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).

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(9.0)

0.355 MAX.

1.15 MAX.

(29.2)

PIN SPACING OF 0.100" IS STANDARD. PIN SPACING OF 0.150 ISAVAILABLE ON SPECIAL ORDER. ALSO AVAILABLE ARE MODELS WITH ELECTROSTATIC SHIELDS. CONSULT FACTORY FOR PART NUMBERS. NONSTANDARD SCHEMATICS AND PIN-OUTS CAN ALSO BE PRODUCED FOR SPECIFIC CUSTOMER REQUIREMENTS. GENERAL SPECIFICATIONS SIZE I

GENERAL S	PECIFICA	TIONS		SIZE I	(3.2)	1 (1	.00 5.4)	Ť
COIL				or Sty 20		,	,	
Pull-in Voltage:	85% of nominal	voltage or less		Margaranne -		_	-	± 100 MAX.
Drop Out Voltage:	10% of nominal voltage or more				T <u>-</u>			D.16)
Max. Voltage:	110% of nominal voltage							 ▲
Resistance:	±10 % measure	d @ 25°C			L	– 0.050 TYP. (1.27)		
Coil Power:	See chart	勝特力材料 886-3-	5753170	7		、 ,		
Duty:	Continuous	胜特力电子(上海) 86-21-		SIZE II		-	_	T I
		胜特力电子(深圳) 86-755		37				500 MAX. 2.7)
CONTACTS		Http://www.100y.c	om. tw	Angrecianty s		- =		,
Contact Material:	Rhodium/Mercu	•		WIT OF		- 0.100 TYP.		
Contact Resistance:	100 milliohms m					(2.54)		
Contact Rating:	2 amp 500 VDC				1			
	3 amps max cor	ntinuous carry current.		° Т	0.050 TYF			
TIMING					(1 <u>.27)</u>	-O 0.100 T		
Operate time:		② nominal voltage.		Spacing betwee	n filled		·/	
Reset time:	2.5 mS or less @	② nominal Voltage.		in circles in sche		•	0	
				are on 0.100 grid				
DIELECTRIC STRENG				Pin omitted				
Across Open Conta <mark>ct</mark>	s: 1000 VDC			on unfilled circle	es.			
Between Mutually								
Insulation Points:								4
Insulation Resistance	: 1000 megohms	min $(\alpha, 100 \text{ VDC})$						
	-					COIL	MEASUREI) @ 25°C
Capacitance:	2.0 pf typical co		CASE	WIRING	STANDARD	COIL NOMINAL	MEASUREI NOMINAL	NOMINAL
Capacitance:	-		CASE SIZE	DIAGRAMS	PART	NOMINAL INPUT	NOMINAL RESISTANCE	NOMINAL POWER
Capacitance:	2.0 pf typical co	il to contact	CASE SIZE	DIAGRAMS (TOP VIEWED)		NOMINAL	NOMINAL	NOMINAL
Capacitance: TEMPERATURE Operating:	2.0 pf typical co -37°C to +85°C	il to contact @ rated operation	CASE SIZE	DIAGRAMS (TOP VIEWED) SPDT MERCURY	PART	NOMINAL INPUT	NOMINAL RESISTANCE	NOMINAL POWER
Capacitance:	2.0 pf typical co	il to contact @ rated operation	CASE SIZE	DIAGRAMS (TOP VIEWED)	PART NUMBERS	NOMINAL INPUT	NOMINAL RESISTANCE	NOMINAL POWER
Capacitance: TEMPERATURE Operating: Storage:	2.0 pf typical co -37°C to +85°C -40°C to +105°C	il to contact @ rated operation	SIZE	DIAGRAMS (TOP VIEWED) SPDT MERCURY	PART	NOMINAL INPUT	NOMINAL RESISTANCE	NOMINAL POWER
Capacitance: TEMPERATURE Operating: Storage: SHOCK RESISTANCE	2.0 pf typical co -37°C to +85°C -40°C to +105°C	il to contact @ rated operation	CASE SIZE	DIAGRAMS (TOP VIEWED) SPDT MERCURY	PART NUMBERS	NOMINAL INPUT VOLTAGE	ΝΟΜΙΝΑL RESISTANCE (OHMS) 330 Ω	NOMINAL POWER (mW)
Capacitance: TEMPERATURE Operating: Storage:	2.0 pf typical co -37°C to +85°C -40°C to +105°C	il to contact @ rated operation	SIZE	DIAGRAMS (TOP VIEWED) SPDT MERCURY	PART NUMBERS	NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS)	NOMINAL POWER (mW)
Capacitance: TEMPERATURE Operating: Storage: SHOCK RESISTANCE Operating:	2.0 pf typical co -37°C to +85°C -40°C to +105°C 50 g's	il to contact @ rated operation	SIZE	DIAGRAMS (TOP VIEWED) SPDT MERCURY	PART NUMBERS	NOMINAL INPUT VOLTAGE	ΝΟΜΙΝΑL RESISTANCE (OHMS) 330 Ω	NOMINAL POWER (mW)
Capacitance: TEMPERATURE Operating: Storage: SHOCK RESISTANCE Operating: VIBRATION RESISTANCE	2.0 pf typical co -37°C to +85°C -40°C to +105°C 50 g's	il to contact @ rated operation	SIZE	DIAGRAMS (TOP VIEWED) SPDT MERCURY	PART NUMBERS	NOMINAL INPUT VOLTAGE	ΝΟΜΙΝΑL RESISTANCE (OHMS) 330 Ω	NOMINAL POWER (mW)
Capacitance: TEMPERATURE Operating: Storage: SHOCK RESISTANCE Operating:	2.0 pf typical co -37°C to +85°C -40°C to +105°C 50 g's	il to contact @ rated operation	SIZE	DIAGRAMS (TOP VIEWED) SPDT MERCURY	PART NUMBERS	NOMINAL INPUT VOLTAGE	ΝΟΜΙΝΑL RESISTANCE (OHMS) 330 Ω	NOMINAL POWER (mW)
Capacitance: TEMPERATURE Operating: Storage: SHOCK RESISTANCE Operating: VIBRATION RESISTANCE Operating:	2.0 pf typical co -37°C to +85°C -40°C to +105°C 50 g's	il to contact @ rated operation	SIZE	DIAGRAMS (TOP VIEWED) SPDT MERCURY	PART NUMBERS W134MPCX-2 W134MPCX-3	NOMINAL INPUT VOLTAGE	ΝΟΜΙΝΑL RESISTANCE (OHMS) 330 Ω	NOMINAL POWER (mW)
Capacitance: TEMPERATURE Operating: Storage: SHOCK RESISTANCE Operating: VIBRATION RESISTANCE Operating: LIFE EXPECTANCY	2.0 pf typical co -37°C to +85°C -40°C to +105°C 50 g's VCE 20 g's, 40 Hz to	il to contact @ rated operation 2 200 Hz	SIZE	DIAGRAMS (TOP VIEWED) SPDT MERCURY	PART NUMBERS	NOMINAL INPUT VOLTAGE	ΝΟΜΙΝΑL RESISTANCE (OHMS) 330 Ω	NOMINAL POWER (mW)
Capacitance: TEMPERATURE Operating: Storage: SHOCK RESISTANCE Operating: VIBRATION RESISTANCE Operating:	2.0 pf typical co -37°C to +85°C -40°C to +105°C 50 g's NCE 20 g's, 40 Hz to 50,000,000 ope	il to contact @ rated operation 2 200 Hz rations @ rated load	SIZE	DIAGRAMS (TOP VIEWED) SPDT MERCURY	PART NUMBERS W134MPCX-2 W134MPCX-3	NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS) 330 Ω 1400 Ω	NOMINAL POWER (mW) 435 410
Capacitance: TEMPERATURE Operating: Storage: SHOCK RESISTANCE Operating: VIBRATION RESISTANCE Operating: LIFE EXPECTANCY Electrical:	2.0 pf typical co -37°C to +85°C -40°C to +105°C 50 g's NCE 20 g's, 40 Hz to 50,000,000 ope	il to contact @ rated operation 2 200 Hz	SIZE	DIAGRAMS (TOP VIEWED) SPDT MERCURY	PART NUMBERS W134MPCX-2 W134MPCX-3	NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS) 330 Ω 1400 Ω	NOMINAL POWER (mW) 435 410
Capacitance: TEMPERATURE Operating: Storage: SHOCK RESISTANCE Operating: VIBRATION RESISTANCE Operating: LIFE EXPECTANCY Electrical:	2.0 pf typical co -37°C to +85°C -40°C to +105°C 50 g's NCE 20 g's, 40 Hz to 50,000,000 ope	il to contact @ rated operation 2 200 Hz rations @ rated load	SIZE	DIAGRAMS (TOP VIEWED) SPDT MERCURY	PART NUMBERS	NOMINAL INPUT VOLTAGE 12 24 12	NOMINAL RESISTANCE (OHMS) 330 Ω 1400 Ω	NOMINAL POWER (mW) 435 410
Capacitance: TEMPERATURE Operating: Storage: SHOCK RESISTANCE Operating: VIBRATION RESISTANCE Operating: LIFE EXPECTANCY Electrical: Mechanical:	2.0 pf typical co -37°C to +85°C -40°C to +105°C 50 g's NCE 20 g's, 40 Hz to 50,000,000 ope	il to contact @ rated operation 2 200 Hz rations @ rated load	SIZE	DIAGRAMS (TOP VIEWED) SPDT MERCURY 5 0 0 1 0 DPDT MERCURY 8 0 0 0 2 7 0 0 0 1 0 UP	PART NUMBERS	NOMINAL INPUT VOLTAGE 12 24 12	NOMINAL RESISTANCE (OHMS) 330 Ω 1400 Ω	NOMINAL POWER (mW) 435 410
Capacitance: TEMPERATURE Operating: Storage: SHOCK RESISTANCE Operating: VIBRATION RESISTANCE Operating: LIFE EXPECTANCY Electrical: Mechanical: MISCELLANEOUS	2.0 pf typical co -37°C to +85°C -40°C to +105°C 50 g's NCE 20 g's, 40 Hz to 50,000,000 ope 10,000,000 ope	il to contact @ rated operation 2 200 Hz rations @ rated load rations @ no load	SIZE	DIAGRAMS (TOP VIEWED) SPDT MERCURY 5 0 0 0 0 0 5 0 0 0 0 5 0 0 0 0 5 0 0 0 0	PART NUMBERS	NOMINAL INPUT VOLTAGE 12 24 12	NOMINAL RESISTANCE (OHMS) 330 Ω 1400 Ω	NOMINAL POWER (mW) 435 410
Capacitance: TEMPERATURE Operating: Storage: SHOCK RESISTANCE Operating: VIBRATION RESISTANCE Operating: LIFE EXPECTANCY Electrical: Mechanical: Operating Position:	2.0 pf typical co -37°C to +85°C -40°C to +105°C 50 g's NCE 20 g's, 40 Hz to 50,000,000 ope 10,000,000 ope 10,000,000 ope	il to contact @ rated operation 2 200 Hz rations @ rated load rations @ no load	SIZE I II	DIAGRAMS (TOP VIEWED) SPDT MERCURY 5 0 0 0 0 5 0 0 0 0	PART NUMBERS W134MPCX-2 W134MPCX-3 W134MPCX-8	NOMINAL INPUT VOLTAGE 12 24 12 12 NODE	NOMINAL RESISTANCE (OHMS) 330 Ω 1400 Ω 230 Ω	NOMINAL POWER (mW) 435 410 620
Capacitance: TEMPERATURE Operating: Storage: SHOCK RESISTANCE Operating: VIBRATION RESISTANCE Operating: LIFE EXPECTANCY Electrical: Mechanical: MISCELLANEOUS Operating Position: Enclosure:	2.0 pf typical co -37°C to +85°C -40°C to +105°C 50 g's VCE 20 g's, 40 Hz to 50,000,000 ope 10,000,000 ope 10,000,000 ope	il to contact @ rated operation 2 200 Hz rations @ rated load rations @ no load	SIZE	DIAGRAMS (TOP VIEWED) SPDT MERCURY 5 0 0 0 0 0 5 0 0 0 0 5 0 0 0 0 5 0 0 0 0	PART NUMBERS	NOMINAL INPUT VOLTAGE 12 24 12 12 NODE	NOMINAL RESISTANCE (OHMS) 330 Ω 1400 Ω	NOMINAL POWER (mW) 435 410

THE RELAYS REQUIRE 1/2 INCH SPACING FROM THE SIDE OF THE ADJACENT RELAYS.

7 PHONE: (843) 393-5778 FAX: (843) 393-4123 EMAIL: info@magnecraft.com

CLASS 102VX & 102HVX / HIGH VOLTAGE SWITCHING RELAY

SPST - N.O., 5 TO 10 MILLIAMPS

EPOXY ENCAPSULATED HIGH VOLTAGE REED. SPST-NO TUNGSTEN CONTACTS SWITCHES LOADS UP 10 MA @ 5000 VOLTS DC CLASS 102HV SAME AS ABOVE EXCEPT: SWITCHES 10,000 VOLTS WITH LOADS UP TO 5 mA DC

GENERAL SPECIFICATIONS

COIL

Pull-in Voltage:	75% of nominal voltage or less
Drop Out Voltage:	10% of nominal voltage or more
Max. Voltage:	110% of nominal voltage
Resistance:	±10 % measured @ 25°C
Coil Power:	See chart
Duty:	Continuous
CONTACTS	

Contact Material: Contact Resistance: Contact Rating: Tungsten 200 milliohms max 10 ma 5000 VDC 5 ma @ 10,000 VDC

1 mS or less @ nominal voltage

1 mS or less @ nominal Voltage

TIMING

Operate time: Release time:

DIELECTRIC STRENGTH

Across Open Contacts:	12,000 VDC
Between Mutually	
Insulation Points:	12,000 VDC
Insulation Resistance:	1000 megohms min. @ 500 VDC
Capacitance:	5 pf typical coil to contact

TEMPERATURE

Operating: Storage: -40°C to +85°C @ rated operation -40°C to +105°C

SHOCK RESISTANCE

Operating:

30 g's, 11 mS, 1/2 sine wave

VIBRATION RESISTANCE

Operating:

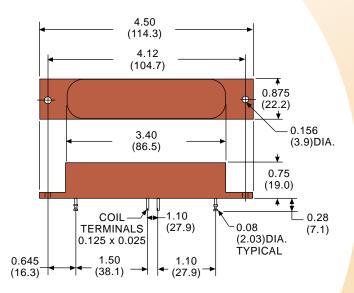
10 g's, 10 Hz to 1000 Hz

LIFE EXPECTANCY

Electrical: Mechanical: 1,000,000 operations @ rated load 10,000,000 operations @ no load

MISCELLANEOUS

Operating Position: Enclosure: Weight: Any Epoxy encapsulated 49 grams approx. OUTLINE DIMENSIONS DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).



Do not use wire heavier than #22 AWG. Excess stress on terminals could cause damage to internal components

勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw



		COIL M	EASURED	@ 25°C	
WIRING DIAGRAMS (TOP VIEWED)	STANDARD PART NUMBERS	INPUT	NOMINAL RESISTANCE (OHMS)	NOMINAL POWER (mW)	
	5,000 VOLTS	NORMALLY	OPEN		
••	W102VX-49	6 VDC	70 Ω	500 mW	
	W102VX-50	12 VDC	250 Ω	580 mW	
	W102VX-51	24 VDC	1000 Ω	580 mW	
000	10,000 VOLTS NORMALLY OPEN				
	W102HVX-3	24 VDC	400 Ω	1.5 Watts	



COAXIAL R.F. SWITCHING RELAY

 PANEL MOUNT WITH RG58C/U
 胜特力电子(上海) 86-21-34970699

 PANEL (50 OHM)
 胜特力电子(深圳) 86-755-83298787

 SWITCHING 150 WATTS UP TO 470 MHz

SPDT, 150 WATTS

OUTLINE DIMENSIONS DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).

GENERAL SPECIFICATIONS

COL. Pull-in Voltage: 75% of nominal voltage or less Drop Out Voltage: 10% of nominal voltage or more Max. Voltage: 110% of nominal voltage Resistance: ±10 % measured @ 25 °C Coll Power: Contract Material: Duty: Continuous Contact Resistance: 50 milliohms max. & rated load Contact Resistance: 50 milliohms max. & rated load Contact Rating: 15 ms or less @ nominal voltage. Reset time: 7 nS or less @ nominal voltage. Reset time: 50 virs DetLECTRIC STRENCTH Across Open Contacts: 500 V ms Between Mutually 1000 V ms Insulation Resistance: 1000 worgs ins min. @ 500 VDC Capacitance: 30 pf maximum contact to open contact CHPERATURE 5.000,000 operations @ rated load MiscelLLANEOUS 5.000,000 operations @ rated load MiscelLANEOUS 0.000 operations @ no load	GENERAL SP	ECIFICATIONS		1.73			
Puli-in Voltage: Drap Out Voltage: Max. Voltage: 10% of nominal voltage or more Max. Voltage: 10% of nominal voltage Contract Resistance: 50 milliohms max. & rated load Contact Resistance: 50 milliohms min. @ 500 VDC Capacitance: 50 00 V ms Between Mutually Insulation Points: 1000 vr ms Insulation Points: 1000 operations @ rated load MscelLankeOUS Electrical: 5.000.000 operations @ rated load MscelLankeOUS Mscall Weight: 85 grams approx. Strape: 50 0000 operations @ rated load MscellankeOUS Strape: 50 0000 operations @ rated load MscellankeOUS Strape: 50 0000 operations @ rated load MscellankeOUS Strape: 50 0000 operations @ rated load MscellankeOUS Mscall Weight: 50 0000 operations @ rated load MscellankeOUS Mscall Weight: 50 0000 operations @ rated load MscellankeOUS Strape: 50 0000 operations @ rated load MscellankeOUS Mscall Msc	COIL		_ RG58C/U		► RG58C 50 OHM	/U_ //S7 ↓	
Drop Out Voltage: 10% of nominal voltage or more Max. Voltage: 110% of nominal voltage or more 110% of nominal voltage 10% of nominal voltage Resistance: ±10 % measured @ 25 C Coll Power: See chart Duty: Continuous Contact Material: Soliver alloy Contact Material: Soliver alloy Contact Rating: 150 watts 85 V rms TIMING 150 watts 85 V rms Operate time: 15 mS or less @ nominal voltage. Across Open Contacts: 500 V rms Insulation Points: 1000 V rms Insulation Points: 1000 V rms Insulation Points: 500 C to +65°C @ rated operation Storage: -55°C to +65°C @ rated operation Storage: -55°C to +65°C @ rated operation MiscELLANEOUS Operating: Operating Position: Any Enclosure: Metal Weigh: 55 grams approx.	Pull-in Voltage:	75% of nominal voltage or less					71
Interview 1000 or forminal voltage Resistance: 1000 or forminal voltage Contract Material: Silver alloy Contract Material: So milliohms max. & rated load Contact Material: So milliohms max. & rated load Contact Rating: 150 watts 85 V ms TIMING Operate time: Operate time: 15 mS or less @ nominal voltage. DieLeCTRIC STRENGTH Arros or less @ nominal voltage. Across Open Contacts: 500 V ms Between Mutually 1000 V ms Insulation Resistance: 1000 v ms 1000 v ms 1000 v ms Insulation Resistance: 1000 v ms Insulation Resistance: 1000 v perations @ rated load Norage: -55° C to +455° C @ rated operation Storage: -55° C to +455° C @ rated operation Storage: -55° C to +405° C Operating Position: Any Metal 100,000 operations @ no load MSCELLANEOUS Operating Position: Operating Position: Any Weight: 85 grams approx.	Drop Out Voltage:	10% of nominal voltage or more					
Resistance: 10 % inteasure (@ 2.5 C Coil Power: See chart Duty: Continuous CONTACTS Silver alloy Contact Material: Silver alloy Contact Resistance: 50 millohms max. & rated load Contact Resistance: 50 millohms max. & rated load Contact Resistance: 15 m S or less @ nominal voltage. Operate time: 7 mS or less @ nominal voltage. 7 mS or less @ nominal voltage. Discussion Points: 1000 V rms Insulation Resistance: 1000 V rms Insulation Resistance: 1000 V rms Insulation Resistance: 30 pf maximum contact to open contact Storage: -55°C to +65°C @ rated operation Storage: -55°C to +105°C UHELE CTAINCY 5,000,000 operations @ rated load Operating: 5,000,000 operations @ rated load Miscell LANEOUS Operating Position: Ary Metal Weight: 85 grams approx.	Max. Voltage:	110% of nominal voltage		<u> </u>			
Coll Power: Duty: Contact Material: Contact Material: Solver alloy Contact Resistance: Solver alloy Solver	Resistance:	±10 % measured @ 25°C	- 12.0 $-$		▲ 12 (20)	2.0	
Dity: Continuous CONTACTS Silver alloy Contact Material: Silver alloy Contact Resistance: 50 milliohms max. & rated load Contact Rating: 15 wats 85 V rms Derate time: 15 mS or less @ nominal voltage. Present time: 7 mS or less @ nominal voltage. Across Open Contacts: 500 V rms Between Mutually 1000 V rms Insulation Points: 1000 V rms Insulation Points: 1000 operations @ to open contact Coperating: -55°C to +65°C @ rated operation Storage: -55°C to +65°C @ rated load Mchanical: 100,000 operations @ no load MiSCELLANEOUS Operating Position: Operating Position: Any Enclosure: Metal Weight: 85 grams approx.	Coil Power:	See chart	~ 0.1	120 DIA THRU HOL	ES	4.0)	
CONTACTS Contact Material: Silver alloy Contact Resistance: 50 milliohms max. & rated load Contact Rating: 150 watts 85 V rms TIMING Operate time: Operate time: 7 mS or less @ nominal voltage. 7 mS or less @ nominal voltage. 15 mS or less @ nominal voltage. DIELECTRIC STRENGTH Across Open Contacts: Across Open Contacts: 500 V rms Between Mutually 1000 megohms min. @ 500 VDC Insulation Points: 1000 V rms Insulation Points: 1000 megohms min. @ 500 VDC Soperating: -55'C to +65'C @ rated operation Storage: -55'C to +105'C LIFE EXPECTANCY 5,000,000 operations @ rated load MisceLLANEOUS Operating Position: Operating Position: Any Enclosure: Metal Weight: 85 grams approx.	Duty:	Continuous			S)		
Contact Resistance: 50 milliohms max. & rated load Contact Rating: 150 watts 85 V rms TIMING Operate time: Operate time: 7 mS or less @ nominal voltage. Participation Points: 15 mS or less @ nominal voltage. DIELECTRIC STRENGTH Across Open Contacts: 500 V rms Insulation Points: 1000 V rms Insulation Points: 1000 V rms Insulation Points: 1000 v rms Insulation Resistance: 30 pf maximum contact to open contact Operating: -55°C to +65°C @ rated operation Storage: -55°C to +105°C LIFE EXPECTANCY 5,000,000 operations @ rated load MiscelLLANEOUS Any Operating Position: Any Metal 85 grams approx. Storage: 85 grams approx.	CONTACTS			(29.05)		I	
Contact Resistance: 50 fillionitis flax. & rated load Contact Rating: 150 watts 85 V ms 150 watts 85 V ms 150 watts 85 V ms 150 ms 150 ms 15 mS or less @ nominal voltage. Reset time: 7 mS or less @ nominal voltage. DIELECTRIC STRENGTH Across Open Contacts: 500 V ms Between Mutually Insulation Points: 1000 V ms Insulation Points: 1000 V ms Insulation Points: 1000 V ms Insulation Points: 1000 V ms Insulation Resistance: 200 fm aximum contact to open contact TEMPERATURE Operating: -55°C to +65°C @ rated operation Storage: -55°C to +105°C Electrical: 5,000,000 operations @ rated load MiscelLANEOUS Operating Position: Any Enclosure: Weight: 85 grams approx. Weight: 85 grams approx. Weight: Nommal.	Contact Material:	Silver alloy	╶═ ╘══╤ ╁ ═══ ╂┊	Ψ			
Contact rearing: In which is the set of th	Contact Resistance:	50 milliohms max. & rated load	╶╒═╋═══╸┸╺══┓╉┊	, <u> </u>	↓ <u></u>	(10.71) (19.5)
TIMING Operate time: 15 mS or less @ nominal voltage. Reset time: 7 mS or less @ nominal voltage. DIELECTRIC STRENGTH Across Open Contacts: 500 V rms Between Mutually 1000 V rms Insulation Resistance: 1000 megohms min. @ 500 VDC Capacitance: 30 pf maximum contact to open contact TEMPERATURE Operating: -55°C to +65°C @ rated operation Storage: -55°C to +105°C LIFE EXPECTANCCY Electrical: 5,000,000 operations @ rated load Mechanical: 100,000 operations @ no load MiscelLANEOUS Operating Position: Operating Position: Any Enclosure: Metal Weight: 85 grams approx. Vieight: 85 grams approx.	Contact Rating:	150 watts 85 V rms	(6.35) 0.850				
Coperating Position: Any Electrical: 5,000,000 operations @ rated load MiscleLLANEOUS Operating: Operating Position: Any Enclosure: Metal Storage: Strandards Strandards Modeline: Operating: Strandards MiscleLLANEOUS Operating: Operating: Strandards MiscleLLANEOUS Operating: Operating: Strandards Metal Modulation (Metal) Weight: Strans approx.	TIMING		(<u></u>				
Reset time: 7 mS or less @ nominal voltage. DIELECTRIC STRENGTH Across Open Contacts: 500 V rms Between Mutually 1000 megohms min. @ 500 VDC Capacitance: 30 pf maximum contact to open contact TEMPERATURE Operating: -55°C to +65°C @ rated operation Storage: -55°C to +105°C LIFE EXPECTANCY Electrical: 5,000,000 operations @ rated load Miscell ANEOUS Operating Position: Any Collameters Strandards Nominal voltage Weight: 85 grams approx. WIRING Starting Position: Any Strandards Nominal voltage View Coll Down Strandards Nominal voltage Nominal voltage Action of the strandard strandard strandards Nominal voltage Strandards Nominal voltage Weight: 85 grams approx.	Operate time:	15 mS or less @ nominal voltage.	•	1.28			
Across Open Contacts: 500 V rms Between Mutually 1000 V rms Insulation Points: 1000 megohms min. @ 500 VDC Capacitance: 30 pf maximum contact to open contact TEMPERATURE Operating: Operating: -55°C to +65°C @ rated operation Storage: -55°C to +105°C LIFE EXPECTANCY Electrical: Electrical: 5,000,000 operations @ rated load MiscellAneous 00,000 operations @ no load MiscellAneous Metal Operating Position: Any Enclosure: Metal Weight: 85 grams approx. View Coll Down) StanDarms NominAil, NominAil	Reset time:	7 mS or less @ nominal voltage.		(32.5) 1			
Between Mutually Insulation Points: 1000 V rms Insulation Resistance: 1000 megohms min. @ 500 VDC Capacitance: 30 pf maximum contact to open contact TEMPERATURE Operating: -55°C to +65°C @ rated operation Storage: -55°C to +105°C LIFE EXPECTANCY Electrical: 5,000,000 operations @ rated load Mechanical: 100,000 operations @ no load MISCELLANEOUS Operating Position: Enclosure: Any Metal 85 grams approx. Wiring Weight: Any Motinal Storage	DIELECTRIC STRENGTH	1					
Insulation Points: 1000 V rms Insulation Resistance: 1000 megohms min. @ 500 VDC 30 pf maximum contact to open contact TEMPERATURE Operating: -55°C to +85°C @ rated operation Storage: -55°C to +105°C LIFE EXPECTANCY Electrical: 5,000,000 operations @ rated load 100,000 operations @ no load MISCELLANEOUS Operating Position: Enclosure: Metal B5 grams approx. Wiring Star Barbaro Mominal B5 grams approx.	Across Open Contacts:	500 V rms					
Insulation Resistance: Insulation Resistance: 1000 megohms min. @ 500 VDC 30 pf maximum contact to open contact TEMPERATURE Operating: -55°C to +65°C @ rated operation Storage: -55°C to +105°C LIFE EXPECTANCY Electrical: 5,000,000 operations @ rated load Mechanical: 100,000 operations @ no load MISCELLANEOUS Operating Position: Any Enclosure: Metal Weight: 85 grams approx. WIRING DIAGRAMS (Side View Coll Down) SpDT	Between Mutually					-1	
Capacitance: 30 pf maximum contact to open contact TEMPERATURE Operating: -55°C to +65°C @ rated operation Storage: -55°C to +105°C LIFE EXPECTANCY 5,000,000 operations @ rated load Mechanical: 100,000 operations @ no load MISCELLANEOUS Any Coperating Position: Any Enclosure: Metal Weight: 85 grams approx. Wire view coll bowing Nominal insum Nominal insum Nominal insum of the view coll bowing insu of	Insulation Points:	1000 V rms					
TEMPERATURE Operating: -55°C to +65°C @ rated operation Storage: -55°C to +105°C LIFE EXPECTANCY 5,000,000 operations @ rated load Mechanical: 100,000 operations @ no load MISCELLANEOUS Any Deprating Position: Any Metal 85 grams approx. Weight: 85 grams approx.	Insulation Resistance:	1000 megohms min. @ 500 VDC					
Operating: -55°C to +65°C @ rated operation Storage: -55°C to +105°C LIFE EXPECTANCY 5,000,000 operations @ rated load Mechanical: 100,000 operations @ no load MISCELLANEOUS Any Operating Position: Any Enclosure: Metal Weight: 85 grams approx. Weight: 85 grams approx.	Capacitance:	30 pf maximum contact to open contact					
Storage: -55°C to +105°C LIFE EXPECTANCY 5,000,000 operations @ rated load Mechanical: 5,000,000 operations @ no load MISCELLANEOUS Any Operating Position: Any Enclosure: Metal Weight: 85 grams approx. Wister View Coll Down) Standards Nominal Nominal Nominal Nominal Nominal Nominal Nominal Nominal View Coll Down) Spot	TEMPERATURE						
LIFE EXPECTANCY Electrical: Mechanical: Diperating Position: Enclosure: Weight: Metal 85 grams approx. Standard Mominal Standard Standard Mominal Nomina	Operating:	-55°C to +65°C @ rated operation					
Electrical: 5,000,000 operations @ rated load Mechanical: 100,000 operations @ no load MISCELLANEOUS Operating Position: Enclosure: Metal Weight: 85 grams approx. Wiriw Coll Down SpDT Coll MEASURED @ 25°C STANDARD Nominal	Storage:	-55°C to +105°C					
Electrical: 5,000,000 operations @ rated load Mechanical: 100,000 operations @ no load MISCELLANEOUS Operating Position: Enclosure: Metal Weight: 85 grams approx. Wiriw Coll Down SpDT Coll MEASURED @ 25°C STANDARD Nominal							Contraction of the
Mechanical: 100,000 operations @ no load MISCELLANEOUS		5,000,000 operations @ rated load		de la	1 22, 1		
Operating Position: Any Enclosure: Metal Weight: 85 grams approx. Standards Standards Standards Nominal (OHMS) Standards Nomina		-				2	
Operating Position: Any Enclosure: Metal Weight: 85 grams approx. Standards Standards Standards Nominal (OHMS) Standards Nomina							
Enclosure: Metal Weight: 85 grams approx. WiRING DIAGRAMS (SIDE VIEW COIL DOWN) SPDT COIL MEASURED @ 25°C NOMINAL INPUT VOLTAGE (OHMS) NOMINAL INPUT (MW)		Any			E		
Weight: 85 grams approx. DIAGRAMS STANDARD PART NOMINAL NOMINAL NOMINAL POWER (SIDE VIEW COIL DOWN) SPDT SPDT NOMINAL NOM			WIRING		COIL N	IEASURED	@ 25°C
(SIDE VIEW COIL DOWN) SPDT PART INPUT (SIDE VIEW COIL DOWN) NUMBERS VOLTAGE (OHMS) (mW)							NOMINAL
				PART NUMBERS	INPUT VOLTAGE		
$\begin{array}{c c} & & & & \\ & & & & \\ & & & & \\ & & & & $			SPDT				
W120X-14 12 VDC 500 Ω 288		S A B	2				
3 • • 4 • 4 • 5 • • 5 • • • • • • • • • • • • • • •	-	AGNECO		1			
		RAFT		W120X-14	12 VDC	500 Ω	288
		A CAR					
	9		A				
			¢ 5				

勝特力材料 886-3-5753170





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SECTION 6 CROSS REFERENCE GUIDE

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MAGNECRAFT & STRUTHERS-DUNN	POTTER & BRUMFIELD	CLARE	сото	COTO SPARTIN	GORDOS	HAMILIN	MEDER
W117SIP-1	JWS-117-1	DSS41A05	90010500		741A-9	3621A0500	SIL05-1A75-71L
W117SIP-3	JWS-117-3	DSS41A12	90011201		741A-3	3621A1200	SIL12-1A75-71L
W117SIP-5	JWS-117-5	DSS41A24			741A-7	3621A2400	SIL24-1A75-71L
W117SIP-22	JWS-117-12	DSS41B05			741B-3		
W117SIP-23	JWS-117-14	DSS41B12			741B-5		
W117SIP-24	JWS-117-15	DSS41B24			741B-8		
W117SIP-6	JWS-117-6	DSS41A05B			741B-10	3621A0510	SIL05-1A75-71D
W117SIP-8	JWS-117-8	DSS41A12B			741A-4	3621A1210	SIL12-1A75-71D
W117SIP-10	JWS-117-110	DSS41A24B			741A-8	3621A2410	SIL24-1A75-71D
W117SIP-18	JWS-117-17	DSS41B05B			741B-4		
W117SIP-25	JWS-117-19	DSS41B12B			741B-6		
W117SIP-26	JWS-117-30	DSS41B24B			741B-8		
MAGNECRAFT	POTTER &						
& STRUTHERS-DUNN	BRUMFIELD	CLARE	СОТО	COTO SPARTIN		HAMILIN	MEDER
W107DIP-1	JWD-107-1	PRMA10037			831A-3		DIP05-1A75-11L
W107DIP-3	JWD-107-3	PRMA10038			831A-5		DIP12-1A75-11L
W107DIP-4		PRMA10039			831A-7		DIP24-1A75-11L
W107DIP-5	JWD-107-5	PRMA10037B			831A-4		DIP05-1A75-11D
W107DIP-7	JWD-107-7	PRMA10038B			831A-6		DIP12-1A75-11D
W107DIP-8		PRMA10039B			831A-8		DIP24-1A75-11D
MAGNECRAFT & STRUTHERS-DUNN	POTTER & BRUMFIELD	CLARE	СОТО	COTO SPARTIN	GORDOS	HAMILIN	MEDER
W171DIP-2		PRMA1A05	80010500	8L01-05-001	831A-3	721A0500	DIP05-1A75-11L
W171DIP-4		PRMA1A12	80011200	8L01-12-001	831A-5	721A1200	DIP12-1A75-11L
W171DIP-5	JWD-171-5	PRMA1A24		8L01-24-001	831A-7	721A2400	DIP24-1A75-11L
W171DIP-7		PRMA1A05B	80010510	8L01-05-011	831A-4	721A0510	DIP05-1A75-11D
W171DIP-9		PRMA1A12B	80011210	8L01-12-011	831A-6	721A1210	DIP12-1A75-11D
W171DIP-10	JWD-171-10	PRMA1A24B		8L01-24-011	831A-8	721A2410	DIP24-1A75-11D
W171DIP-12	JWD-171-12	PRMA1B05	80210500	8L21-05-001	831B-3	721B0500	DIP05-1B75-11L
W171DIP-14	JWD-171-14	PRMA1B12	80211200	8L21-12-001	831B-5	721B1200	DIP12-1B75-11L
W171DIP-15	JWD-171-15	PRMA1B24		8L21-24-001	831B-7	721B2400	DIP24-1B75-11L
W171DIP-17	JWD-171-17	PRMA1B05B	80210510	8L21-05-011	831B-4	721B0510	DIP05-1B75-11D
W171DIP-19	JWD-171-19	PRMA1B12B	80211210	8L21-12-011	831B-6	721B1210	DIP12-1B75-11D
W171DIP-20	JWD-171-20	PRMA1B24B		8L21-24-011	831B-8	721B2410	DIP24-1B75-11D
W171DIP-21	JWD-171-21	PRMA2A05	80020500	8L02-05-001	832A-3	722A0500	DIP05-2A75-21L
W171DIP-23	JWD-171-23	PRMA2A12	80021200	8L02-12-001	832B-5	722A1200	DIP12-2A75-21L
W171DIP-24	JWD-171-24	PRMA2A24		8L02-24-001	832B-7	722A2400	DIP24-2A75-21L
W171DIP-25	JWD-171-25	PRMA2A05B	80020510	8L02-05-011	832B-4	722A0510	DIP05-2A75-21D
W171DIP-27	JWD-171-27	PRMA2A12B	80021210	8L02-12-011	832B-6	722A1210	DIP12-2A75-21D
W171DIP-28	JWD-171-28	PRMA2A24B		8L02-24-011	831B-8	722A2410	DIP24-2A75-21D
MAGNECRAFT & STRUTHERS-DUNN	POTTER & BRUMFIELD				GORDOS		
W172DIP-1	JWD-172-1				836C-1	721R0500	
W172DIP-3	JWD-172-3				836C-3	721R0300	
W172DIP-4	JWD-172-3				836C-5	721R1200	
W172DIP-5	JWD-172-4				836C-2	721R2400	
W172DIP-7	JWD-172-5 JWD-172-7				836C-2 836C-4	721R0310 721R1210	
W172DIP-8	JWD-172-7 JWD-172-8				836C-4	721R1210 721R2410	
	JWD-1/2-0				0000-0	721112410	

THE CROSS REFERENCE IS INTENDED TO MATCH FOOT PRINT, INTERNAL WIRING, AND CONTACT LOAD RATINGS. CONSTRUCTION FEATURES AND GENERAL SPECIFICATIONS SHOULD BE COMPARED IF EXACT REPLACEMENT IS REQUIRED.



Magnecraft & Struthers-Dunn

Your Contact for Relays

SECTION 6 CROSS REFERENCE GUIDE

MAGNECRAFT & STRUTHERS-DUNN	POTTER & BRUMFIELD	GORDOS	HAMLIN	MEDER	CLARE	COTO
W172DIP-17		835C-1				
W172DIP-19		835C-3				
W172DIP-20		835C-5				
W172DIP-21		835C-2				
W172DIP-23		835C-4				
W172DIP-24		835C-6				
W172DIP-141	JWD-172-155	831C-1	721C0500	DIP05-1C75-51L	PRMA1C05	80410500
W172DIP-145	JWD-172-157	831C-3	721C1200	DIP12-1C75-51L	PRMA1C12	80411200
W172DIP-146	JWD-172-158	831C-5	721C2400	DIP24-1C75-51L	PRMA1C24	
W172DIP-147	JWD-172-159	831C-2	721C0510	DIP05-1C75-51D	PRMA1C05B	80410510
W172DIP-149	JWD-172-161	831C-4	721C1210	DIP12-1C75-51D	PRMA1C12B	80411210
W172DIP-150	JWD-172-162	831C-6	721C2410	DIP24-1C75-51D	PRMA1C24B	
W172DIP-31		831C-1	721E0500			80510500
W172DIP-33		831C-3	721E1200			80511200
W172DIP-34		831C-5	721E2400			
W172DIP-35			721E0510			80510510
W172DIP-37			721E1210			80511210
W172DIP-38			721E2410			

THE CROSS REFERENCE IS INTENDED TO MATCH FOOT PRINT, INTERNAL WIRING, AND CONTACT LOAD RATINGS. CONSTRUCTION FEATURES AND GENERAL SPECIFICATIONS SHOULD BE COMPARED IF EXACT REPLACEMENT IS REQUIRED.

FOR REED RELAY APPLICATION ENGINEERING ASSISTANCE

Joseph Zintel, PRODUCT MANAGER FAX: (843) 395-8530 EMAIL: jzintel@magnecraft.com FAX ON DEMAND: 1-800-891-2957 DOCUMENT: 500

U. S. A. TELEPHONE: (843) 393-5778 FAX: (843) 393-4123 WEBSITE: www.magnecraft.com EMAIL: info@magnecraft.com

EUROPE

TELEPHONE:4989 / 75080310FAX:4989 / 7559344WEBSITE:www.magnecraft.comEMAIL:renatesteinback@magnecraft.de

勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw