



TECHNICAL DATA

SILICON CONTROLLED RECTIFIER

Qualified per MIL-PRF-19500/276

Devices

2N2323

2N2324 2N2326 2N2328

 2N2323S
 2N2324S
 2N2326S
 2N2328S
 2N2329

 2N2323A
 2N2324A
 2N2326A
 2N2328A
 2N2329S

2N2323AS 2N2324AS 2N2326AS 2N2328AS

Qualified Level

JAN JANTX JANTXV

MAXIMUM RATINGS

MAXIMUM RATINGS								
Ratings	Sym	2N2323,S/ 2N2323A,S	2N2324,S/ 2N2324A,S	2N2326,S/ 2N2326A,S	2N2328,S/ 2N2328A,S	2N2329,S	Unit	
Reverse Voltage	V_{RM}	50	100	200	300	400	Vdc	
Working Peak Reverse Voltage	V_{RM}	75	150	300	400	500	Vpk	
Forward Blocking Voltage	V_{FBXM}	50 ^(3/4)	$100^{(3/4)}$	$200^{(3/4)}$	$300^{(3/4)}$	$400^{(3)}$	Vpk	
Average Forward Current (1)	I_{O}	1001	WTIL	0.22	100	110	Adc	
Forward Current Surge Peak ⁽²⁾	I_{FSM}	· V	Olar.	15	MW.	V.COn	Adc	
Cathode-Gate Current	V_{KGM}	V 100 r.	· Mor	6	-11N .10	CON	Vpk	
Operating Temperature	T_{op}	-65 to +125					^{0}C	
Storage Junction Temp	Tata	W.Inc	COM.	-65 to +150	-44 M.F.	-100	^{0}C	

- This average forward current is for an ambient temperature of 80^oC and 180 electrical degrees of conduction.
- Surge current is non-recurrent. The rate of rise of peak surge current shall not exceed 40 A during the first 5 μs after switching from the 'off' (blocking) to the 'on' (conducting) state. This is measured from the point where the thyristor voltage has decayed to 90% of its initial blocking value.
- 3) Gate connected to cathode through 1,000 ohm resistor.
- 4) Gate connected to cathode through 2,000 ohm resistor.



*See appendix A for package outline

ELECTRICAL CHARACTERISTICS

Cha	aracteristics	Symbol	Min.	Max.	Unit
SUBGROUP 2 TESTING	MM OOX.CO	WT	MAL	1100Y.	
Reverse Blocking Current	M.In. COL		TATANA	. 2	
$R_2 = 1 \text{ k}\mu$	2N2323 thru 2N2329	M.I.	44		
	2N2323S thru 2N2329S	WT			
$R_2 = 2 \text{ k}\mu$	2N2323A thru 2N2328A	DIVI.			
	2N2323AS thru 2N2328AS	T		10	μAdc
$V_R = 50 \text{ Vdc}$	2N2323, S, A, AS	I_{RBX1}		10	μΑας
$V_R = 100 \text{ Vdc}$	2N2324, S, A, AS				
$V_R = 200 \text{ Vdc}$	2N2326, S, A, AS				
$V_R = 300 \text{ Vdc}$	2N2328, S, A, AS				
$V_R = 400 \text{ Vdc}$	2N2329, S,				

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W.100Y.COM.TW W.100Y.COM.TW 2N2323, A, AS, S; 2N2324, A, AS, S; 2N2326, A, AS, S; 2N2328, A, AS, S; 2N232, S JAN SERIES

ELECTRICAL CHARACTERISTICS (con't)

WWW.100Y.COM.TW

Characteristics		Symbol	Min.	Max.	Unit
Forward Blocking Current	W 1 100 1.	J. A.		100 .	M^{-1}
$R_2 = 1 \text{ k}\Omega$	2N2323 thru 2N2329	WT	MM	TOOY.	- N '
	2N2323S thru 2N2329S	1.1	TAN V	1.10	CO_{Mr}
$R_2 = 2 k\Omega$	2N2323A thru 2N2328A	MIN	111	$\propto 100^{11}$	Mon
	2N2323AS thru 2N2328AS	${ m I_{FBX1}}$	WW	10	μAdc
$V_R = 50 \text{ Vdc}$	2N2323, S, A, AS	-FBA1		111,100	μιταο
$V_R = 100 \text{ Vdc}$	2N2324, S, A, AS	WTI		10	
$V_R = 200 \text{ Vdc}$	2N2326, S, A, AS	COMP.	XX	M.V.	N.C.
$V_R = 300 \text{ Vdc}$	2N2328, S, A, AS	OMIT		- W.1	00 -
$V_R = 400 \text{ Vdc}$	2N2329, S	CO			J. You
Reverse Gate Current	.1	I_{KG}	KT	200	μAdc
$V_{KG} = 6 \text{ Vdc}$	TW WW 100	10		200	A TOO
Gate Trigger Voltage and Current	WWW.I	ON COM	N.	WWW	
$V_2 = V_{FBX} = 6 \text{ Vdc}; R_L = 100 \Omega$	M.T.	ON'I			$N.To_{O}$
$R_e = 1 \text{ k}\Omega$	2N2323 thru 2N2329 and	V_{GT1}	0.35	0.80	Vdc
	2N2323S thru 2N2329S	I_{GT1}		200	μAdc
$R_e = 2 k\Omega$	2N2323A thru 2N2328A and	V_{GT1}	0.35	0.60	Vdc
TIME TO THE TANK THE	2N2323AS thru 2N2328AS	I_{GT1}		20	μAdc

$R_e = 2 \text{ k}\Omega$	2N2323A thru 2N2328A and 2N2323AS thru 2N2328AS	$ m V_{GT1}$ $ m I_{GT1}$	0.35	20	ναc μAdc
UBGROUP 4 TESTING	ZIVZJZJAJ UHU ZIVZJZJAJ	I GIT	1.1	20	μπατ
Exponential Rate of Voltage Rise	$T_{\star} = 125^{\circ}C$	· OV.CO	W		
	$1.0 \mu F$, repetition rate = 60 pps,		Mer		TWW.
test duration = 15 seconds	1.0 µr, repetition rate = 00 pps,		MILIA		M. A.
$dv/dt = 1.8 \text{ v/}\mu\text{s}, R_3 = 1 \text{ k}\Omega$	2N2323 thru 2N2329 and		Oly	Ī	WWW
$uv/ut = 1.0 v/\mu s$, $R_3 = 1 R_2 z$	2N2323S thru 2N2329S		$O_{M,T}$	N	WW
$dv/dt = 0.7 \text{ v/}\mu\text{s}, R_3 = 2 \text{ k}\Omega$	2N2323A thru 2N2328A and	77,100 7.	COM.		Vdc
WW	2N2323AS thru 2N2328AS	$V_{ m FBX}$	· M	L.M.	
$V_{AA} = 50 \text{ Vdc}$	2N2323, S, A, AS		47	TW	W
$V_{AA} = 100 \text{ Vdc}$	2N2324, S, A, AS		95	- XXI	<1
$V_{AA} = 200 \text{ Vdc}$	2N2326, S, A, AS		190	$V_{IJ,IJ}$	
$V_{AA} = 300 \text{ Vdc}$	2N2328, S, A, AS		285	W	
$V_{AA} = 400 \text{ Vdc}$	2N2329, S		380	M.r.	ſ
Forward "on" Voltage	TW.	MAA	1001.	~1.TV	
i _{FM} = 4a (pk) (pulse), pulse width = 8.5 ms, max; duty cycle = 2% max		V_{FM}	· COV.C	2.2	V(pk)
Holding Current	W. Too.		Too	-OMr.	_ 1
$V_{AA} = 24 \text{ Vdc max}, I_{F1} = 100 \text{ m}$	Adc , $I_{F2} = 10 \text{ mAdc}$		-100X		5.11
Gate trigger source voltage $= 6$	Vdc,		W. 2	COM	W
trigger pulse width = 25 μ s min., R_2 = 330 Ω			W.100	2.0	mAdc
$R_3 = 1 k\Omega$	2N2323 thru 2N2329 and	I_{HOX}	100	2.0	IIIAuc
	2N2323S thru 2N2329S		MM.IO.	ost CO	-XX
$R_3 = 2 k\Omega$	2N2323A thru 2N2328A and		-x11(01.	M.J.M
	2N2323AS thru 2N2328AS	N «		any.Cu	TV