

S12 THRU S1A0

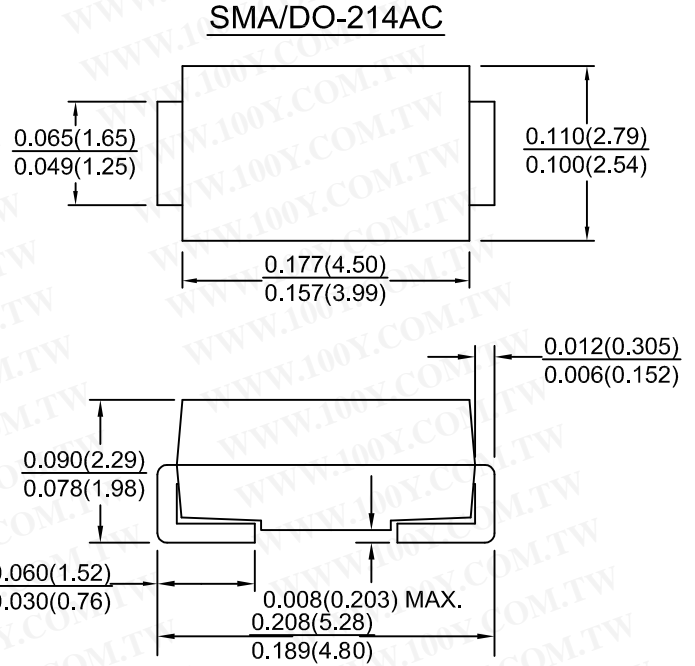
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

FEATURES:

- Low power loss, high efficiency
- High surge current capability
- Low forward voltage drop
- For use in low voltage, high frequency inverters, free wheeling application
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Guard ring for overvoltage protection
- Low profile package
- Build-in strain relief

MECHANICAL DATA

Case : Molded plastic use UL 94V-0 recognized flame retardant epoxy
 Terminals : Solder plated, solderable per MIL-STD-750 Method 2026
 Polarity : Color band on body denotes cathode end
 Mounting Position : Any
 Weight : 0.063 gram, 0.002 ounce



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temp. unless otherwise specified.
 Single phase, half sine wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20 %.

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Characteristic	Symbol	S12	S13	S14	S15	S16	S18	S19	S1A0	Units	
Maximum recurrent peak reverse voltage	V _{RRM}	20	30	40	50	60	80	90	100	Volts	
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	64	70	Volts	
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	90	100	Volts	
Maximum average forward rectified current	I _(AV)	1.0								Amps	
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I _{FSM}	30								Amps	
Maximum instantaneous forward voltage at 1.0 A (NOTE 1)	V _F	0.50	0.55	0.75			0.85			Volts	
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 1)	I _R					0.5					mA
						10.0					
Typical thermal resistance	R _{th-JA} R _{th-JL}					88					°C/W
						28					
Operating junction temperature range	T _j	-65 to +150								°C	
Storage temperature range	T _{stg}	-65 to +150								°C	

NOTE :
 1.Pulse test: 300 us pulse width, 1% duty cycle

RATINGS AND CHARACTERISTIC CURVES S12 THRU S1A0

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FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

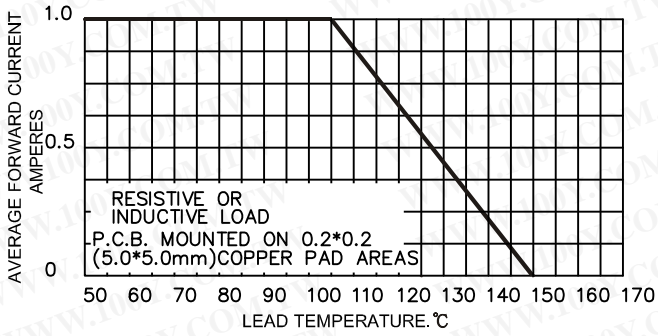


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

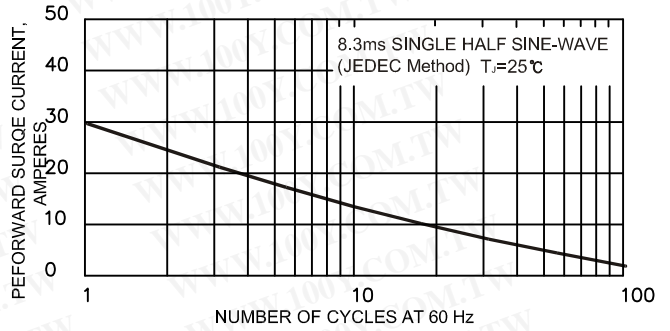


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

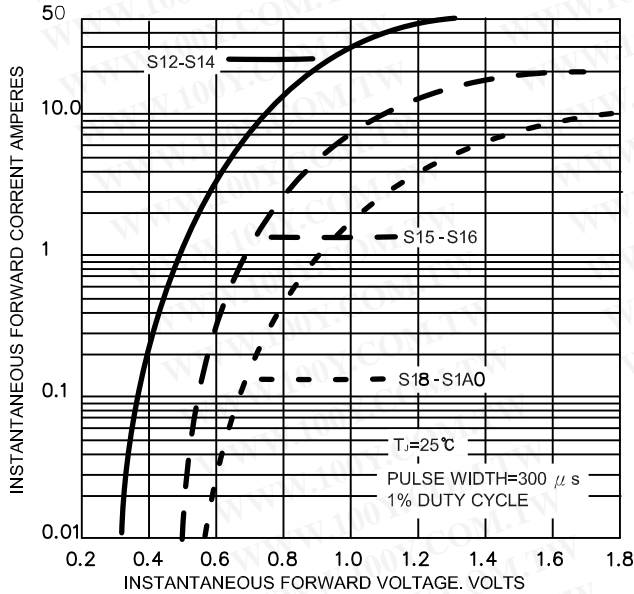


FIG.4-TYPICAL REVERSE CHARACTERISTICS

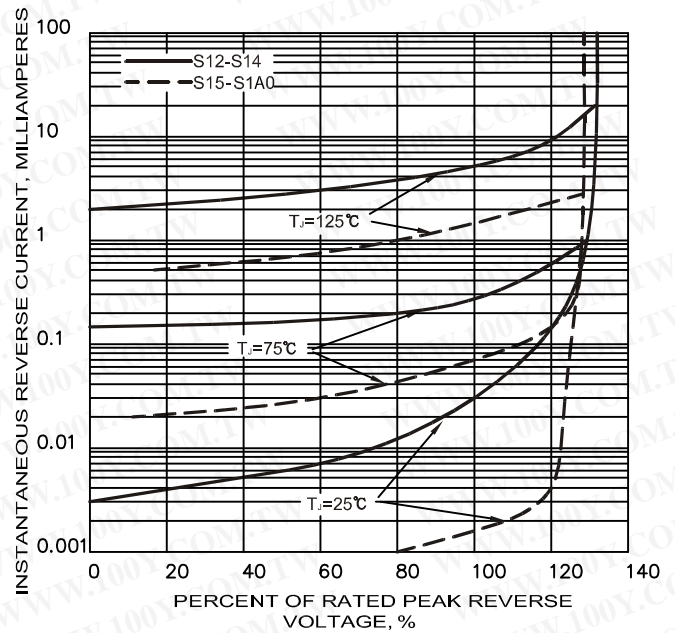


FIG.5-TYPICAL JUNCTION CAPACITANCE

