SL12 THRU SL14

GROWCHILD ELECTRONICS™

SURFACE MOUNT LOW VF SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE: **20 to 40 VOLTS**

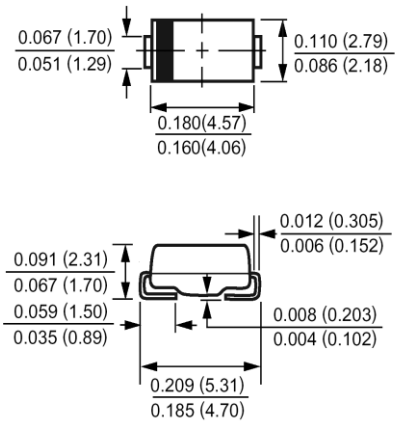
FORWARD CURRENT: **1.0 AMPERE**

http://www.njzrg.com

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- High current capability, low V_F
- Built-in strain relief
- Low profile package
- Metal to silicon rectifier. majority carrier conduction
- High surge capacity
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering : 260°C /10 seconds at terminals

DO-214AC(SMA)



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded plastic, DO-214AC(SMA)

Terminals: Axial leads, solderable per MIL-STD-750, method 2026 guaranteed

Polarity: Color band denotes cathode end

Packaging: 12mm tape per EIA STD RS-481

Weight: 0.002 ounce, 0.064 gram

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60H_Z, resistive or inductive load.

For capacitive load, derate current by 20%.

	Symbols	*SL12*	*SL13*	*SL14*	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	**Volts**
Maximum RMS Voltage	V_{RMS}	14	21	28	**Volts**
Maximum DC Blocking Voltage	V_{DC}	20	30	40	**Volts**
Maximum Average Forward Rectified Current at T_L (See Fig. 1)	$I_{(AV)}$	1.0			**Amp**
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30			**Amp**
Maximum Forward Voltage at 1.0A (Note 1)	V_F	0.38	0.38	0.40	**Volts**
Maximum Reverse Current at T_A=25℃	I_R	0.5			**mAmp**
at Rated DC Blocking Voltage T_A=100℃		20			
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	88			**℃/W**
	$R_{\theta JL}$	28			
Operating Junction Temperature Range	T_J	-50 to +125			
Storage Temperature Range	Tstg	-50 to +150			**℃**

NOTES:

1- Pulse test: 300μs pulse width, 1% duty cycle

2- P.C.B. mounted with 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Areas

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RATINGS AND CHARACTERISTIC CURVES

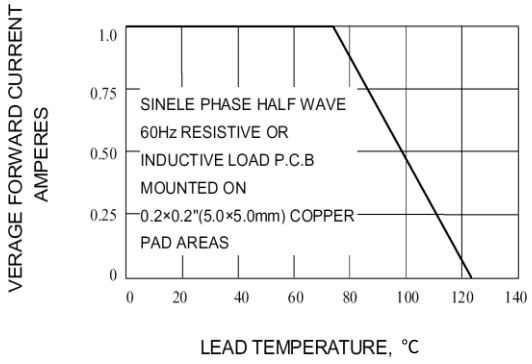

Fig. 1-FORWARD CURRENT DERATING CURVEE

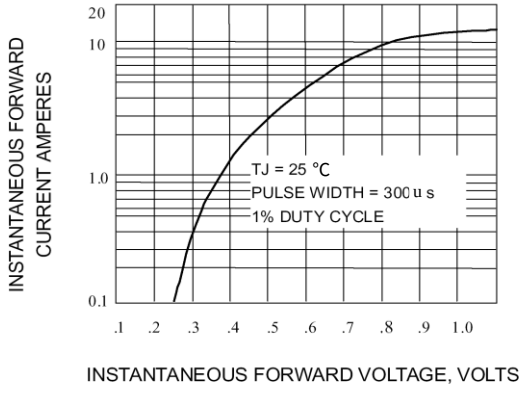

Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

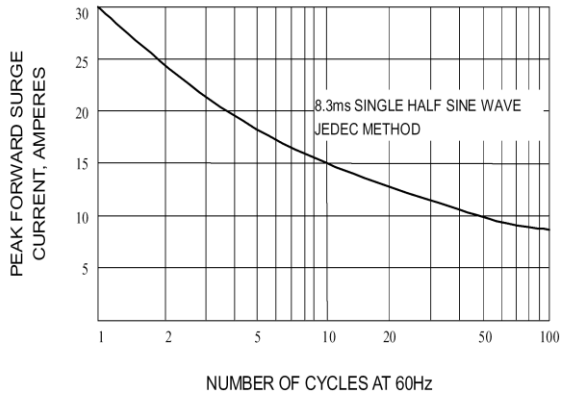

Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT

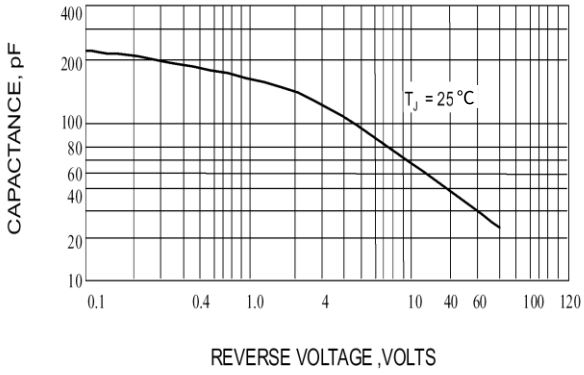

Fig. 4-TYPICAL JUNCTION CAPACITANCE