

SCHOTTKY BARRIER RECTIFIERS

PRODUCT SUMMARY

Surface Mount Low V_F
 Reverse Voltage 20 to 40 volts
 Forward Current 1.0 Ampere



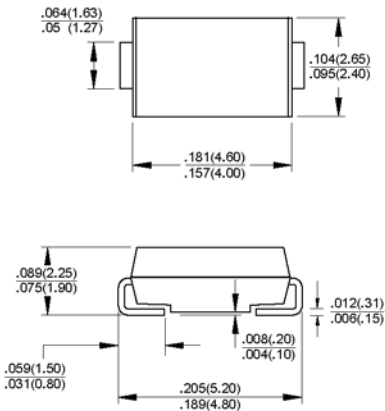
FEATURES

For surface mounted application
 Metal silicon junction, majority carrier conduction
 Low forward voltage drop
 Easy pick and place
 High surge current capability
 Plastic material used carries Underwriters Laboratory
 Classification 94V-0
 Epitaxial construction
 High temperature soldering:
 250°C / 10 seconds at terminals

MECHANICAL DATA

Cases: Molded plastic
 Terminals: Solder plated
 Polarity: Indicated by cathode band
 Weight: 0.002 ounce, 0.064 gram

DO-214AC (SMA)



Dimensions in inches and (millimeters)

Pb Pb-free; RoHS-compliant

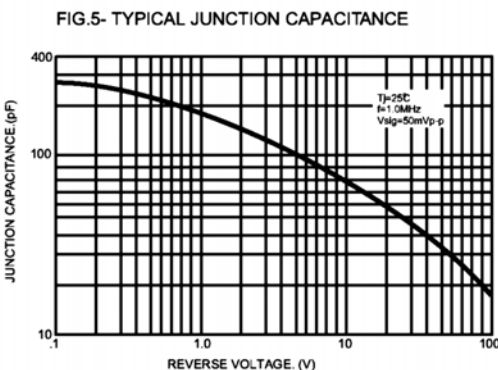
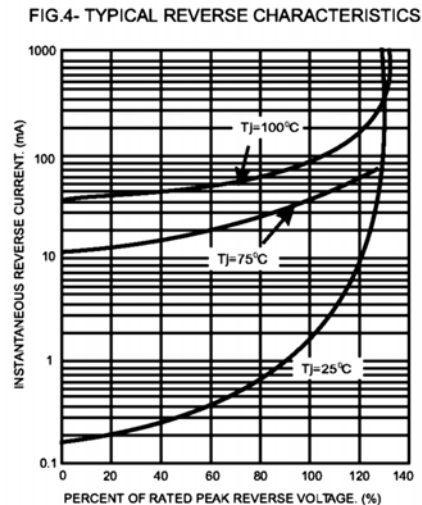
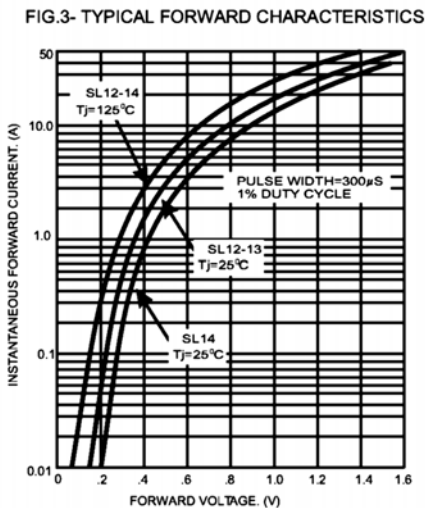
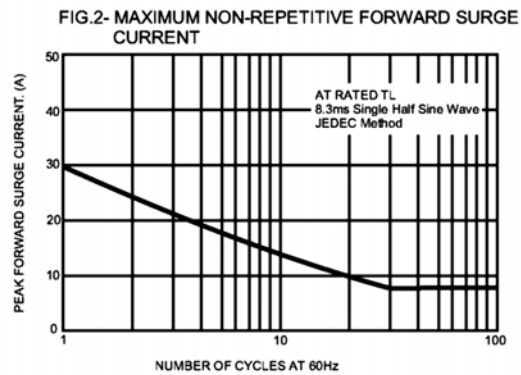
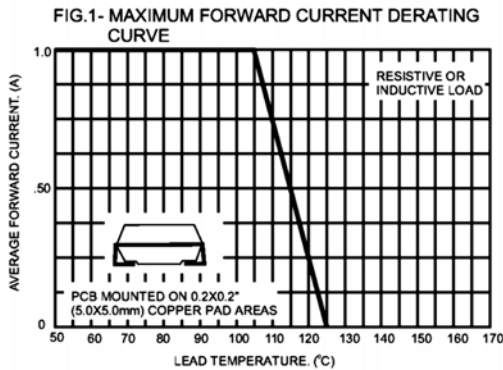
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter	Symbols	SL12	SL13	SL14	Units
Maximum repetitive 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 See Fig. 1	I_{AV}	1.0			Amp
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0			Amps
Maximum instantaneous forward voltage @ 1.0A (Note 1)	V_F	0.385	0.385	0.400	Volts
Maximum DC reverse current @ $T_A=25^{\circ}\text{C}$ at rated DC blocking voltage @ $T_A=100^{\circ}\text{C}$	I_R	2.0 100			mA
Maximum thermal resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	28 88			$^{\circ}\text{C/W}$
Operating junction temperature range	T_J	-55 to +125			$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to +150			$^{\circ}\text{C}$

Notes: 1. Pulse Test with PW=300usec, 1% Duty Cycle.
 2. Measured on P.C. Board with 0.2 x 0.2" (5.0 x 5.0 mm) Copper Pad Areas.

RATINGS AND CHARACTERISTIC CURVES



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