

# SCHOTTKY BARRIER RECTIFIERS

## PRODUCT SUMMARY

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



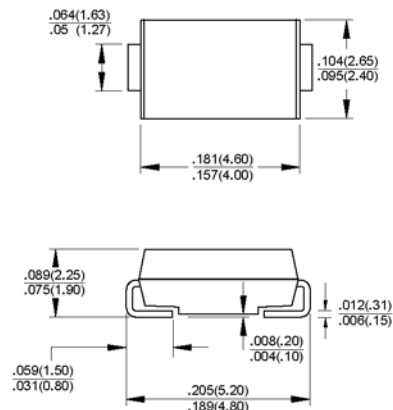
## FEATURES

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-O  
 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)**



**Pb** Pb-free; RoHS-compliant

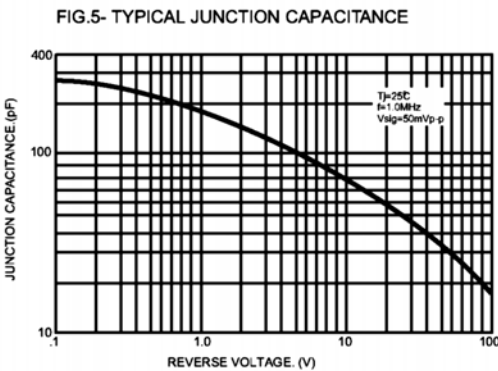
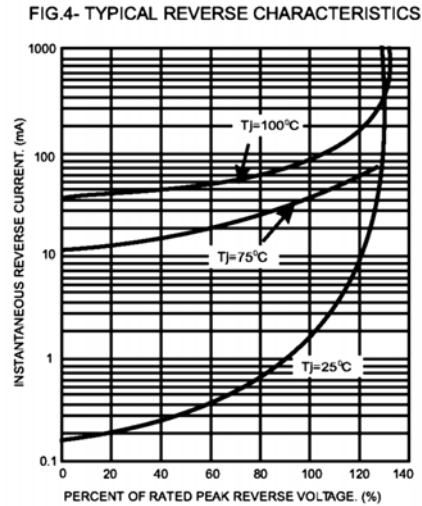
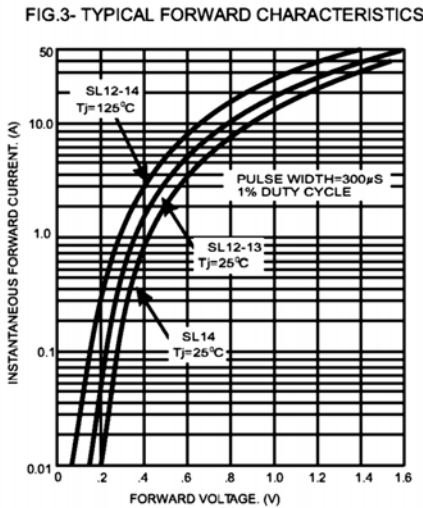
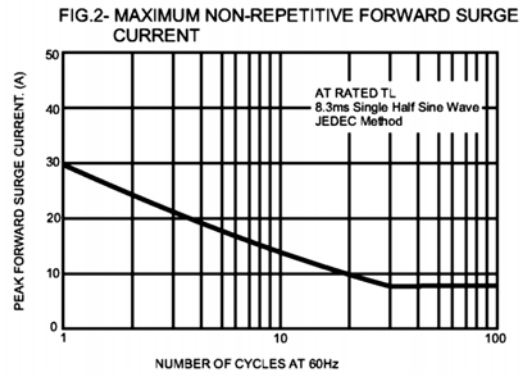
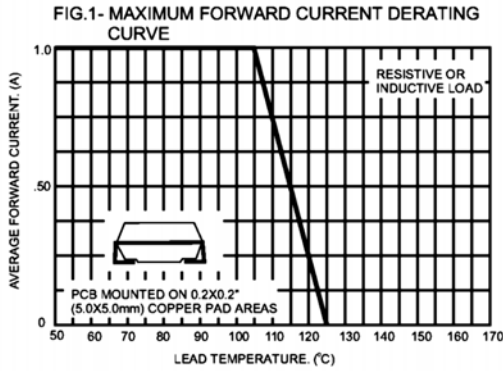
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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 @ $T_A=25^{\circ}C$ at rated DC blocking voltage @ $T_A=100^{\circ}C$	$I_R$	2.0 100			mA
Maximum thermal resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	28 88			°C/W
Operating junction temperature range	$T_J$	-55 to +125			°C
Storage temperature range	$T_{STG}$	-55 to +150			°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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