

Low VF Surface Mount Schottky Barrier Rectifiers

 Lead(Pb)-Free

Features:

- * Plastic package has Underwriters Laboratory
- * Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound.
- * For surface mounted applications.
- * Exceeds environmental standards of MIL-S-19500 / 228
- * Low leakage current

Mechanical Data

- * Case : Molded plastic, JEDEC DO-214AC
- * Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- * Polarity : Indicated by cathode band
- * Mounting Position : Any
- * Weight : 0.05 gram

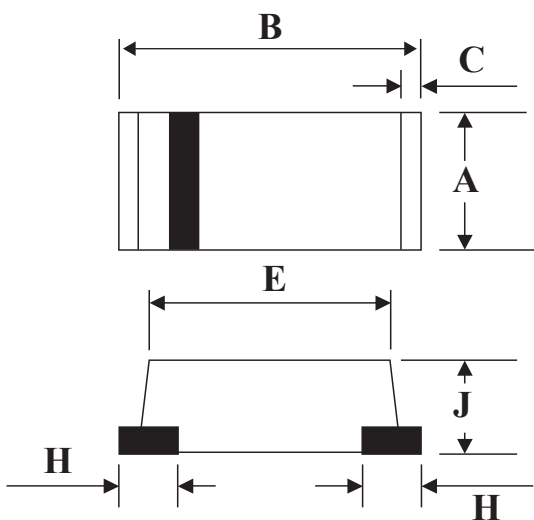
REVERSE VOLTAGE
20-40 Volts
FORWARD CURRENT
1.0 Amperes



SMA-1

SMA-1 Outline Dimension

unit:mm



SMA-1		
Dim	Min	Max
A	2.20	2.80
B	4.20	4.80
C	0.30(Typ)	
E	3.80	4.20
H	1.00(Typ)	
J	1.40	1.80

Maximum Ratings and Electrical Characteristics

Rating 25°C Ambient Temperature Unless Otherwise Specified.

Single Phase Half Wave, 60Hz , Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

Characteristics	Symbol	SL12	SL13	SL14	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Maximum Instantaneous Forward Voltage	V_F	0.38	0.40	0.40	V
Forward Rectified Current (FIG.2)	$I_{F(AV)}$	1.0			A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load(JEDECMethod)	I_{FSM}	30			A
Maximum DC Reverse Current @Tj=25°C At Rated DC Blocking Voltage @Tj=100°C	I_R	1.0 10			mA
Typical Junction Capacitance	C_J	130			pF
Typical Thermal Resistance	$R_{\theta JA}$	80			°C/W
Operating Temperature Range	T_J	-55 to +125			°C
Storage Temperature Range	T_{STG}	-55 to +150			°C

RATING AND CHARACTERISTIC CURVES (SL12 THRU SL14)

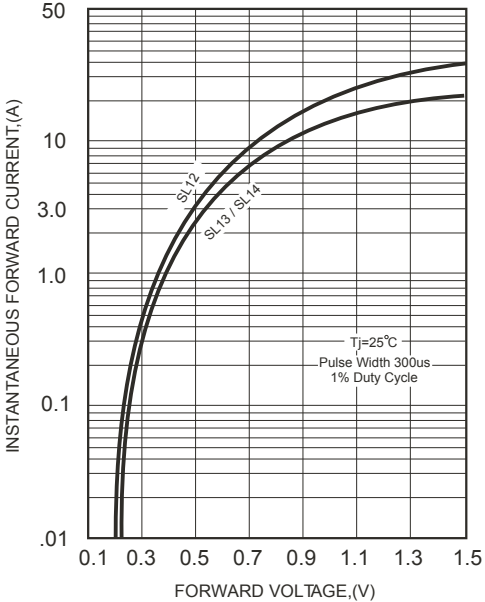


FIG.1 TYPICAL FORWARD CHARACTERISTICS

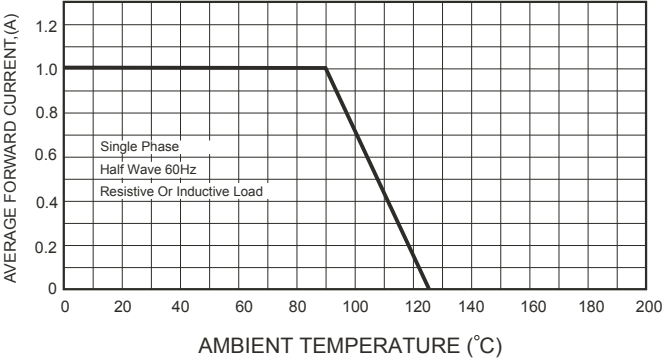


FIG.2 TYPICAL FORWARD CURRENT DERATING CURVE

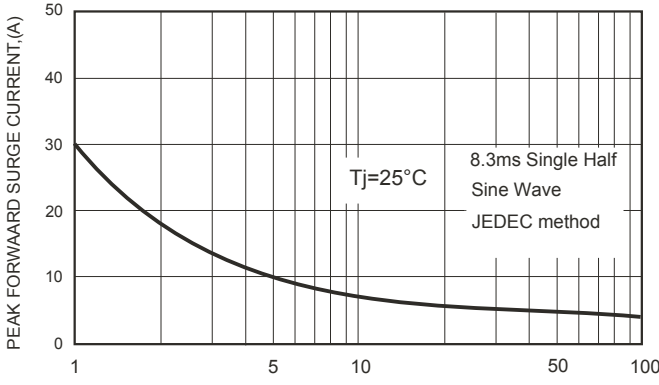


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

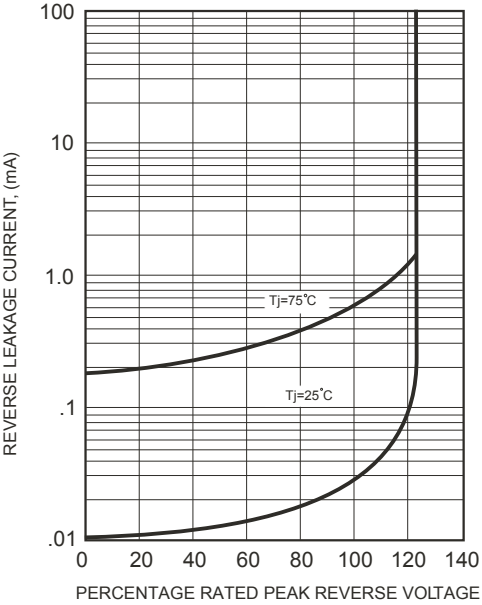


FIG.3 TYPICAL REVERSE CHARACTERISTICS

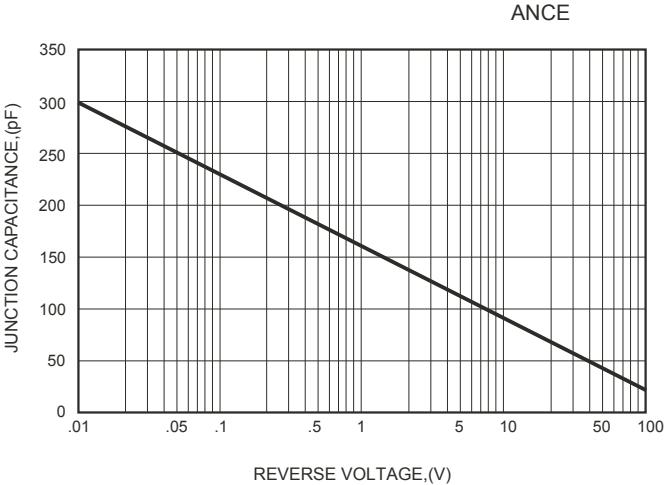


FIG.5 TYPICAL JUNCTION CAPACITANCE