

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.

REVERSE VOLTAGE
20-40 Volts
FORWARD CURRENT
2.0 AMPERES



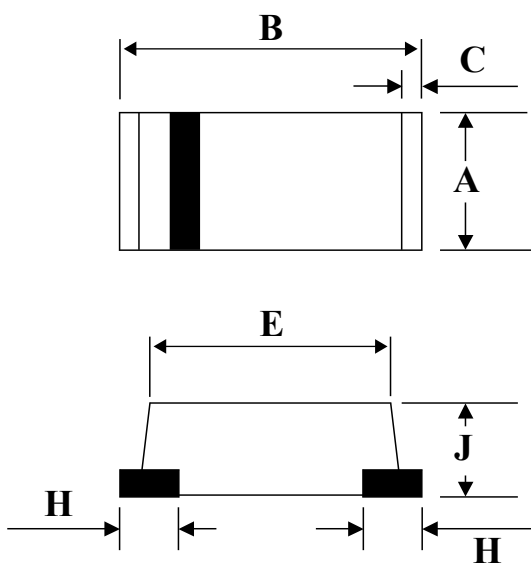
SMA-1

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

SMA-1 Outline Dimension

unit:mm



SMA-1		
Dim	Min	Max
A	2.2	2.8
B	4.2	4.8
C	-	0.30(TYP)
H	-	0.40(TYP)
J	1.4	1.8

MAXIMUM RATING

Characteristics	Symbol	SL22A	SL23A	SL24A	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Continuous Reverse Voltage	V_R	20	30	40	V
Maximum Instantaneous @ $T_A=25^\circ\text{C}$	V_F	0.38	0.40	0.40	V
Maximum Average Forward (Fig.1)	I_O	2.0			A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50			A
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	I_R	1.0 10			mA
Typical Thermal Resistance	$R_{\theta JA}$	70(TYP)			$^\circ\text{C/W}$
Diode Junction Capacitance $f=1\text{MHz}$ and applied 4vDC Reverse Voltage	C_J	160(TYP)			pF
Operating Temperature Range	T_J	+125			$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to+125			$^\circ\text{C}$

Device Marking

SL22A=SL22 , SL23A=SL23 , SL24A=SL24

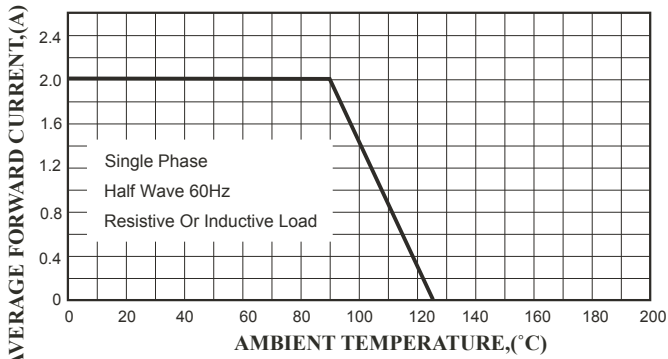


FIG.1 Typical Forward Current Derating Curve

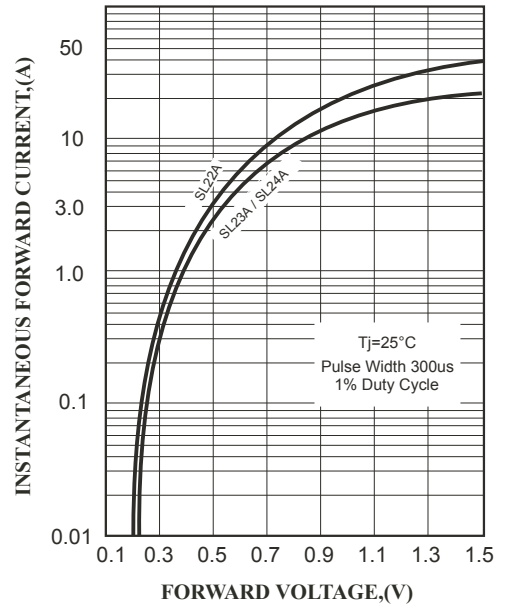


FIG.2 Typical Forward Characteristics

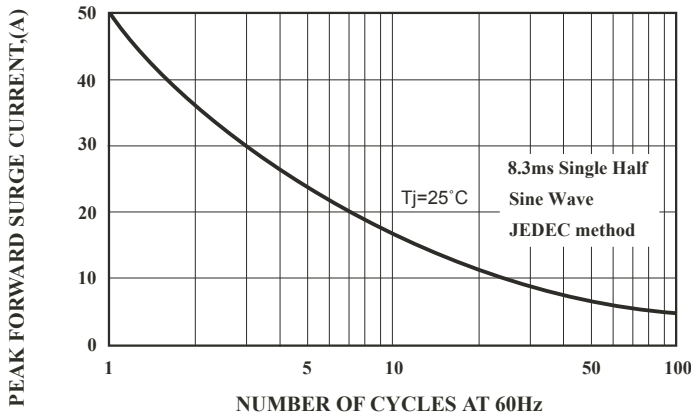


FIG.3 Maximum Non-Repetitive Forward Surge Current

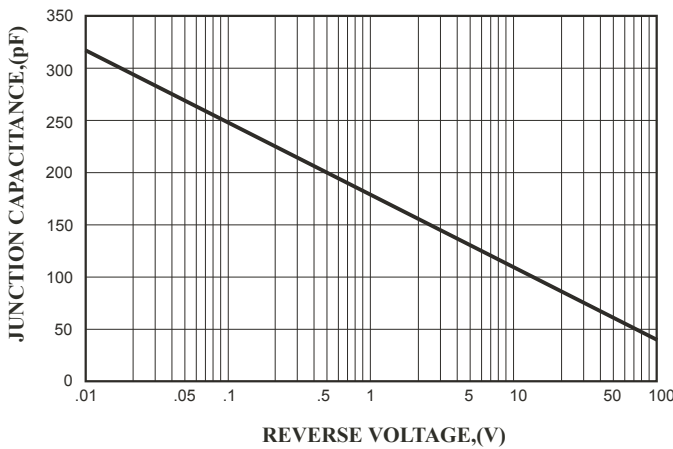


FIG.4 Typical Junction Capacitance

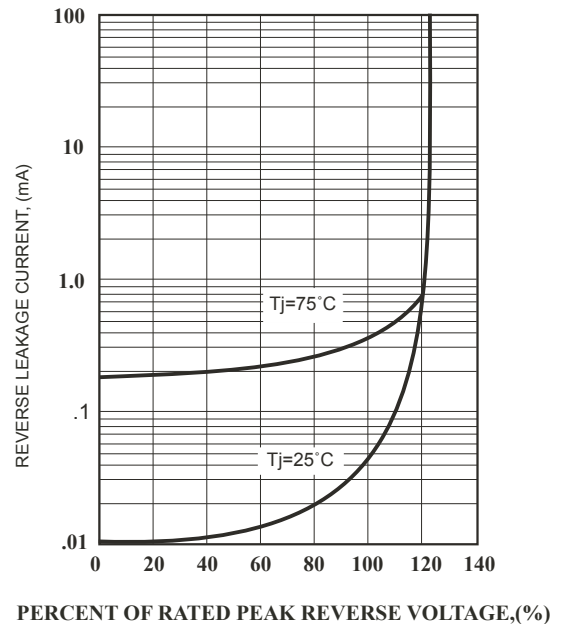


FIG.5 Typical Reverse Characteristics