

Low VF Surface Mount Schottky Barrier Rectifiers

(Pb) Lead(Pb)-Free

Features:

- * Low Surface Mounted Applications
- * Metal-Semiconductor Junction with Guardring
- * Epitaxial Construction
- * Very Low Forward Voltage Drop
- * High Current Capability
- * Plastic Material Has UL Flammability Classification 94V-0
- * For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

Mechanical Data

- * Case : Molded Plastic, MINI-SMA(Similar to SOD-123F)
- * Terminals : Solder Plated, Solderable per ML-STD-750 Method 2026
- * Polarity :Indicated By Cathode Band
- * Weight :0.040 grams

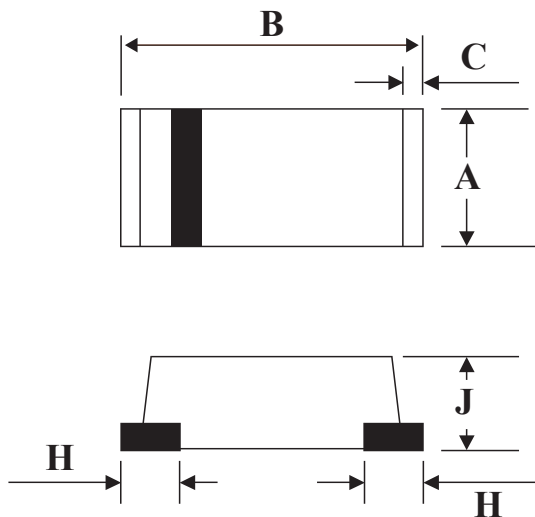
REVERSE VOLTAGE
40Volts
FORWARD CURRENT
1.0 Ampere



MINI-SMA
(SOD-123F)

MINI-SMA Outline Dimension

unit:mm



MINI-SMA		
Dim	Min	Max
A	1.40	1.80
B	3.50	3.90
C	-	0.30(TYP)
H	-	0.70(TYP)
J	1.30	1.70

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	SL14M	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	40	V
Maximum RMS Voltage	VRMS	28	V
Maximum DC Blocking Voltage	VDC	40	V
Maximum Average Forward Rectified Current @TA=90°C	IF(AV)	1.0	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	30	A
Maximum Instantaneous @ TA=25°C Forward Voltage @IF=1.0A@ TA=100°C	VF	0.40 0.35	V
Maximum DC Reverse Current @TA=25°C At Rated DC Blocking Voltage @TA=100°C	IR	0.5 10	mA
Typical Junction Capacitance (1)	CJ	130(TYP)	pF
Typical Thermal Resistance (2)	RθJC	42(TYP)	°C/W
Operating Temperature Range	TJ	-55 to+125	°C
Storage Temperature Range	TSTG	-55 to+150	°C

Device Marking

SL14M = L4

NOTES:

1. Measured at 1.0MHz applied reverse voltage of 4.0V DC.
2. Thermal Resistance Junction to case.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

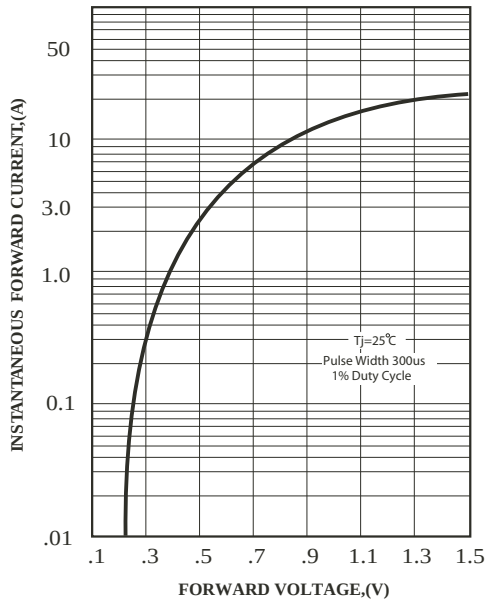


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

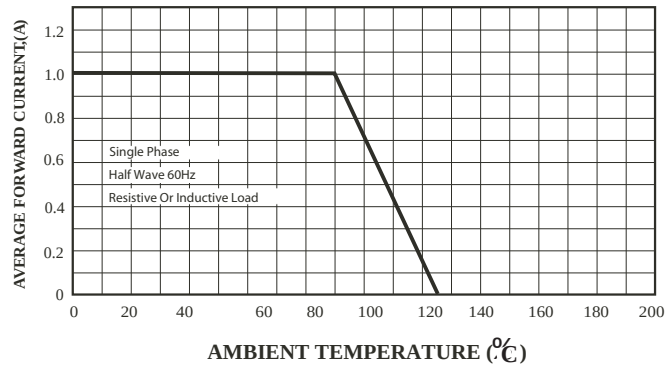


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

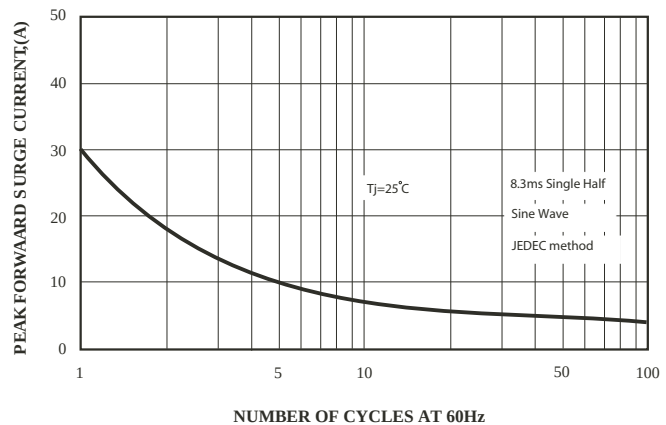


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

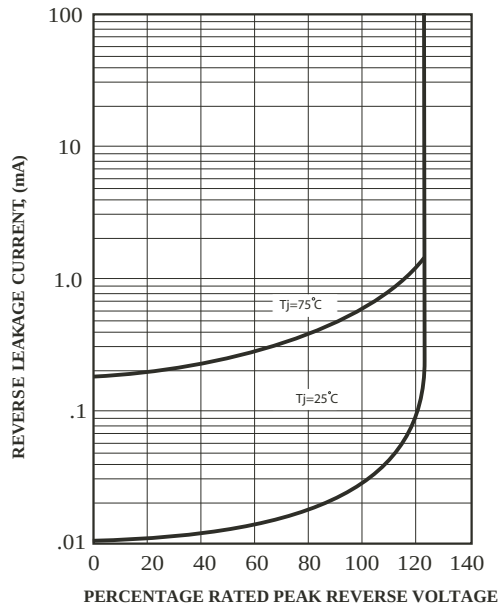


FIG.5-TYPICAL JUNCTION CAPACITANCE

