FF107M SUFACE MOUNT FAST RECOVERY RECTIFIER

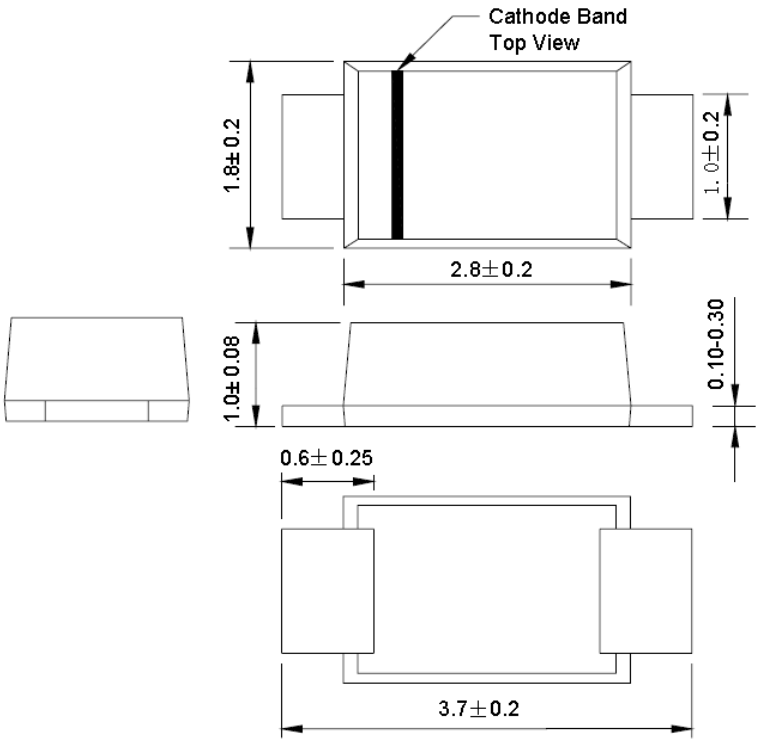
Features:

- **Glass passivated device**
- **Ideal for surface mouted applications**
- **Low reverse leakage**
- **Metallurgically bonded construction**
- **High temperature soldering guaranteed: 250 C/10 seconds,0.375”(9.5mm) lead length, 5 lbs. (2.3kg) tension**
- **Glass passivated chip junction**
- **This is a Pb − Free Device**
- **All SMC parts are traceable to the wafer lot**
- **Additional testing can be offered upon request**

Mechanical Data:

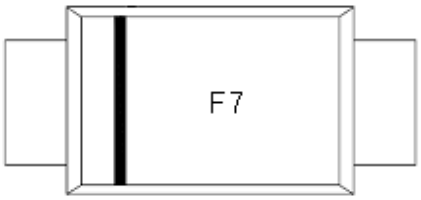
- **Case: JEDEC SOD-123SL molded plastic body over passivated chip**
- **Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026**
- **Polarity: Color band denotes cathode end**
- **Mounting Position: Any**
- **Weight:0.0007 ounce, 0.02 grams**

Mechanical Dimensions: In mm



SOD-123SL

Marking Diagram:



F7 = Part Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
FF107M	SOD-123SL (Pb-Free)	5000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	FFM107	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	1000	VOLTS
Maximum RMS voltage	V_{RMS}	700	VOLTS
Maximum DC blocking voltage	V_{DC}	1000	VOLTS
Maximum average forward rectified current at T_A=65°C (NOTE 1)	$I_{(AV)}$	1.2	Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) T_L=25°C	I_{FSM}	50.0	Amps
Maximum instantaneous forward voltage at 1.2A	V_F	1.3	Volts
Maximum DC reverse current T_A=25°C at rated DC blocking voltage T_A=125°C	I_R	5.0 50.0	μA
Maximum reverse recovery time (NOTE 2)	trr	250	ns
Typical junction capacitance (NOTE 3)	C_J	15	pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	50.0	°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150	°C

Note: 1.Averaged over any 20ms period.
2.Measured with IF=0.5A, IR=1A, Irr=0.25A.
3.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

FIG. 1- FORWARD CURRENT DERATING CURVE

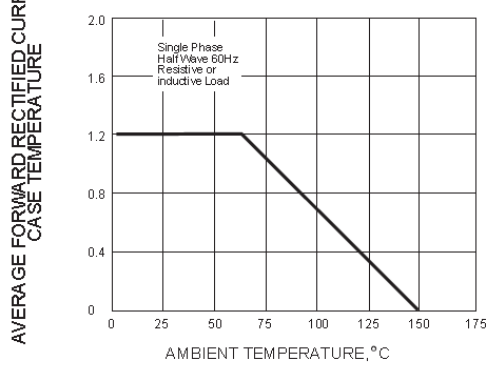


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

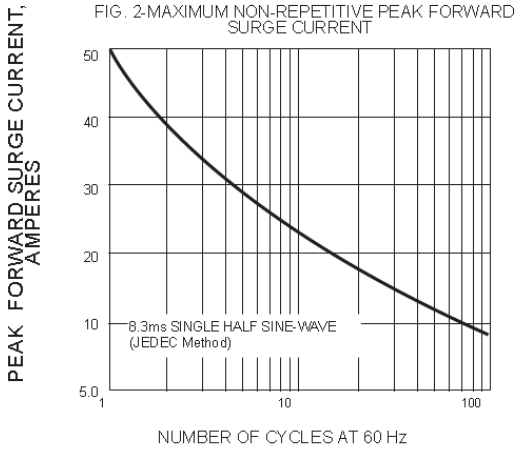


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

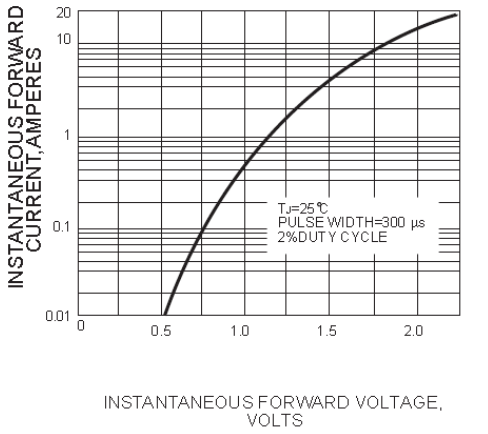


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

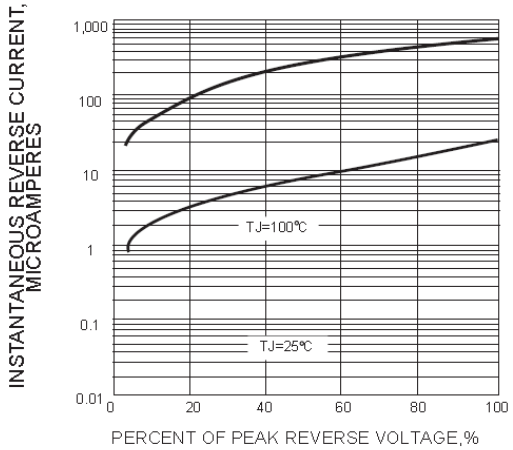


FIG. 5-TYPICAL JUNCTION CAPACITANCE

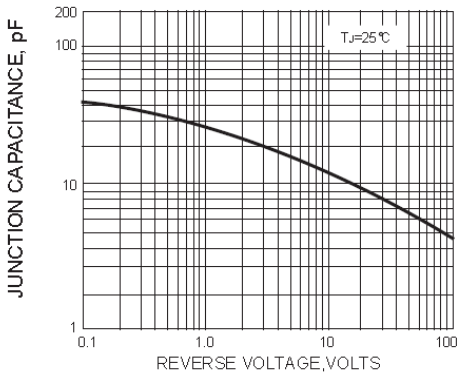


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE