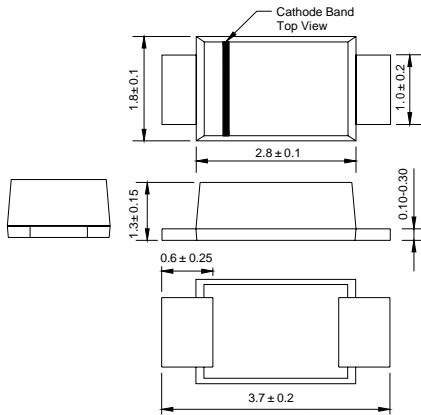




SOD-123FL



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

MECHANICAL DATA

Case: JEDEC SOD-123FL 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:0.006 ounce, 0.02 grams

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%.

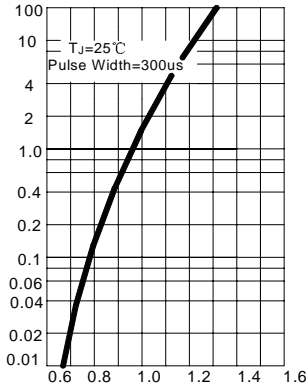
	SYMBOLS	FFM101-M	FFM102-M	FFM103-M	FFM104-M	FFM105-M	FFM106-M	FFM107-M	UNITS
		F1	F2	F3	F4	F5	F6	F7	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at $T_A=65^\circ C$ (NOTE 1)	$I_{(AV)}$	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) $T_L=25^\circ C$	I_{FSM}	20.0							Amps
Maximum instantaneous forward voltage at 1.0A	V_F	1.3							Volts
Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=125^\circ C$	I_R	5.0 50.0							μA
Maximum reverse recovery time (NOTE 2)	t_{rr}	150				250	500		ns
Typical junction capacitance (NOTE 3)	C_J	4							pF
Typical thermal resistance (NOTE 4)	$R_{\theta JA}$	180							K/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							$^\circ C$

- Note:** 1.Averaged over any 20ms period.
 2.Measured with $I_F=0.5A, I_R=1A, I_{rr}=0.25A$.
 3.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 4.Thermal resistance junction to ambient, 6.0 mm² copper pads to each terminal.



FIG.1 – TYPICAL FORWARD CHARACTERISTIC

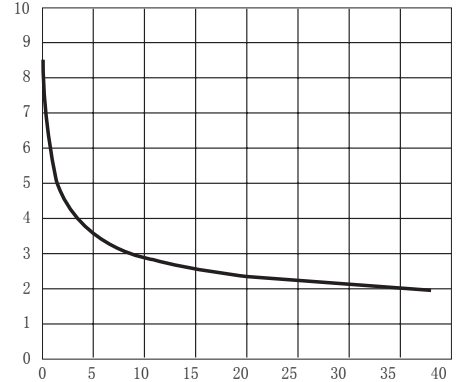
INSTANTANEOUS FORWARD CURRENT
AMPERES



INSTANTANEOUS FORWARD VOLTAGE, V

FIG.2 – TYPICAL JUNCTION CAPACITANCE

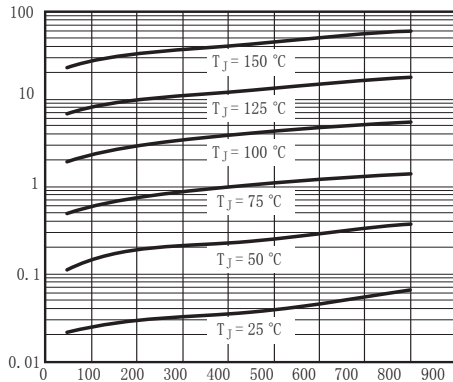
CAPACITANCE, pF



REVERSE VOLTAGE, VOLTS

FIG.3 – TYPICAL INSTANTANEOUS
REVERSE CHARACTERISTICS

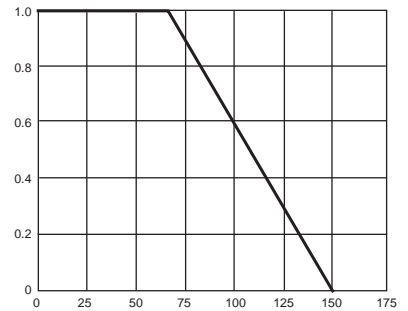
INSTANTANEOUS REVERSE CURRENT
μ-AMPERES



INSTANTANEOUS REVERSE VOLTAGE, V

FIG.4 – FORWARD DERATING CURVE

AVERAGE FORWARD CURRENT,
AMPERES



AMBIENT TEMPERATURE, °C