



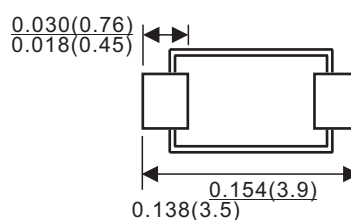
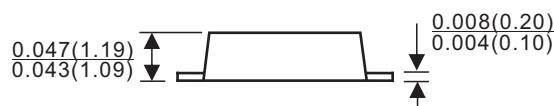
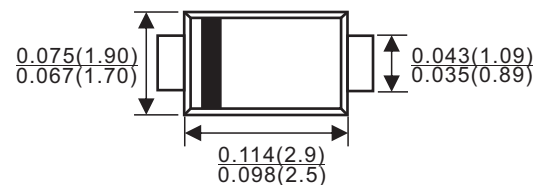
SOD-123FL

Features

- ✧ Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- ✧ Low profile surface mounted application in order to optimize board space.
- ✧ Tiny plastic SMD package.
- ✧ High current capability.
- ✧ High surge capability.
- ✧ Glass passivated chip junction.

Mechanical data

- ✧ Case : Molded plastic, SOD-123FL
- ✧ Polarity : Indicated by cathode band
- ✧ Mounting Position : Any
- ✧ Weight : Approximated 0.01gram



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum ratings

Type Number		FM 4001	FM 4002	FM 4003	FM 4004	FM 4005	FM 4006	FM 4007	UNITS
Device marking code		A1	A2	A3	A4	A5	A6	A7	
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current @ $T_A=75^\circ\text{C}$	$I_{(AV)}$	1.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	25							A
Maximum instantaneous forward voltage @ $I_{FM}=1.0\text{A}$ (Note 1)	V_F	1.1							V
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	I_R	5.0 50							μA
Typical junction capacitance measured at $f=1\text{MHz}$, $V_R=4.0\text{V}$	C_J	15							p F
Typical thermal resistance junction to lead	$R_{\theta JL}$	20							$^\circ\text{C/W}$
Operating temperature range	T_j	- 55 --- + 150							$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 --- + 150							$^\circ\text{C}$

NOTE1.Pulse test: pulse width 300 μsec , duty cycle 2%.



Rating and characteristic curves (FM4001 THRU FM4007)

FIG.1-TYPICAL FORWARD

CHARACTERISTICS

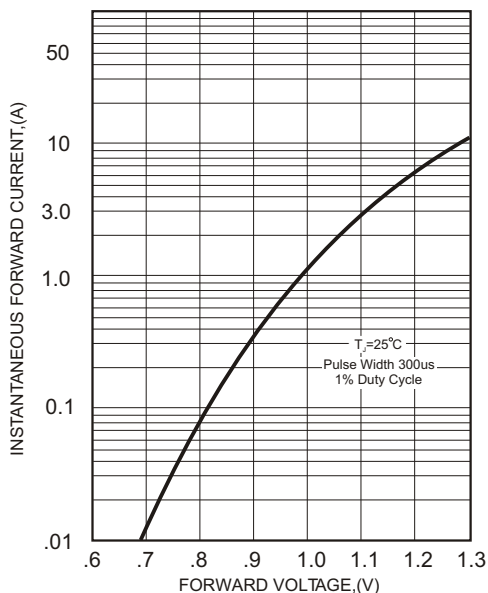


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

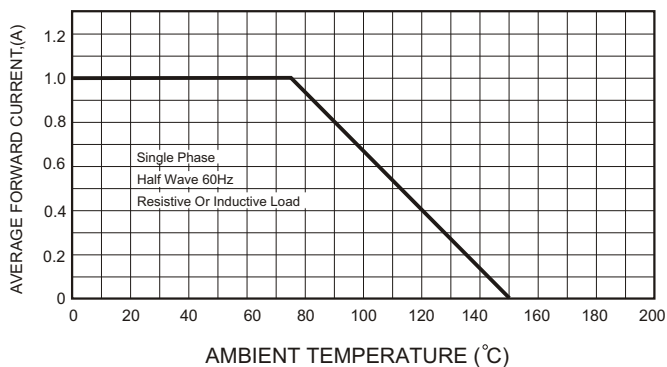


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

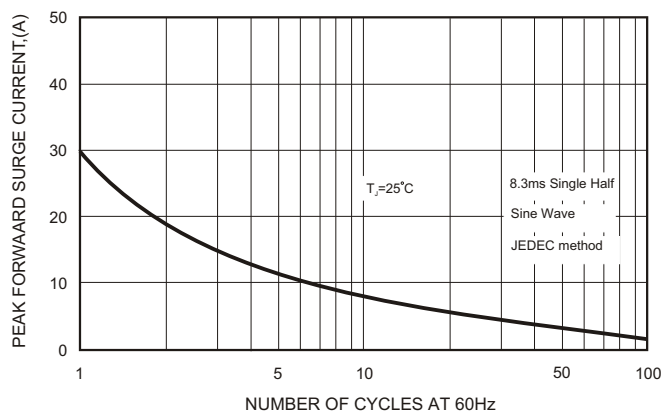


FIG.3 - TYPICAL REVERSE

CHARACTERISTICS

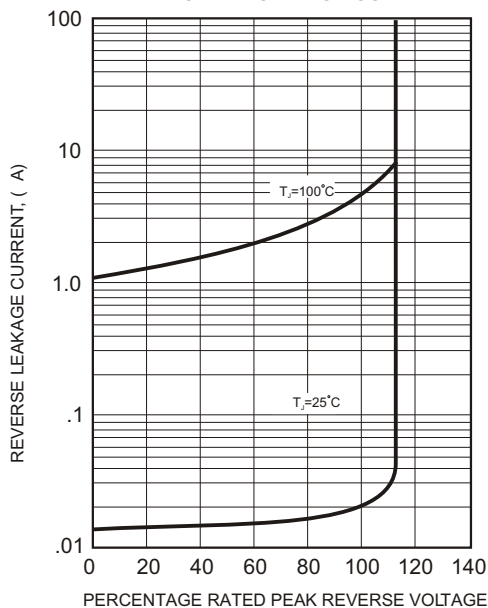
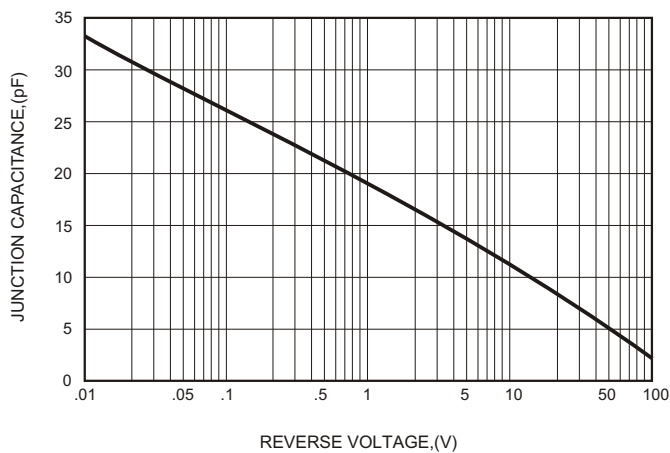


FIG.5-TYPICAL JUNCTION CAPACITANCE



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SOD-123FL	3000/REEL	90000	40X20X22	5.00	4.00