



REVERSE VOLTAGE: 50 - 600 V

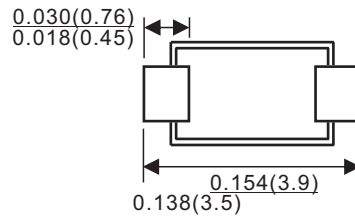
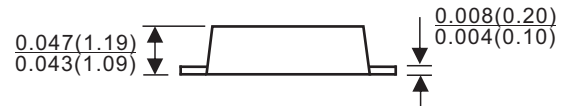
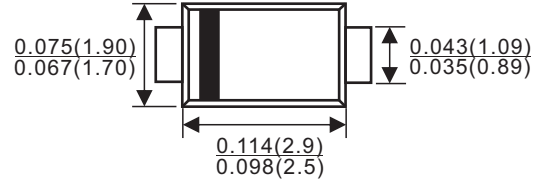
CURRENT: 1.0 A

SOD-123FL



Features

- ✧ Glass passivated device
- ✧ Ideal for surface mounted applications
- ✧ Low leakage current
- ✧ Metallurgically bonded construction
- ✧ High temperature soldering:
250 /10 seconds at terminals



Dimensions in inches and (millimeters)

Mechanical Data

- ✧ Case: JEDEC SOD-123FL, molded plastic over passivated chip
- ✧ Polarity: Color band denotes cathode end
- ✧ Weight: 0.003 ounces, 0.01 gram
- ✧ Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

ABSOLUTE RATINGS

		ER 07A	ER 07B	ER 07C	ER 07D	ER 07E	ER 07G	ER 07H	ER 07J	UNITS
Device marking		E1A	E1B	E1C	E1D	E1E	E1G	E1H	E1J	
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	350	420	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	500	600	V
Maximum average forward rectified current $T_A=65$	$I_{(AV)}$	1.0								A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load $T_L=25$	I_{FSM}	30								A
Maximum instantaneous (NOTE 1) forward voltage at 1.0A	V_F	0.95			1.25		1.7			V
Maximum DC reverse current @ $T_A=25$ at rated DC blocking voltage @ $T_A=125$	I_R	5.0								μ A
		150								
Maximum reverse recovery Time(note2)	T_{rr}	35								nS
Operating temperature range	T_j	- 55 --- + 150								
Storage temperature range	T_{STG}	- 55 --- + 150								

NOTES: 1. Pulse test: 300ms pulse width, 1% duty cycle.

2. Measured with $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.



Ratings AND Characteristic Curves

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

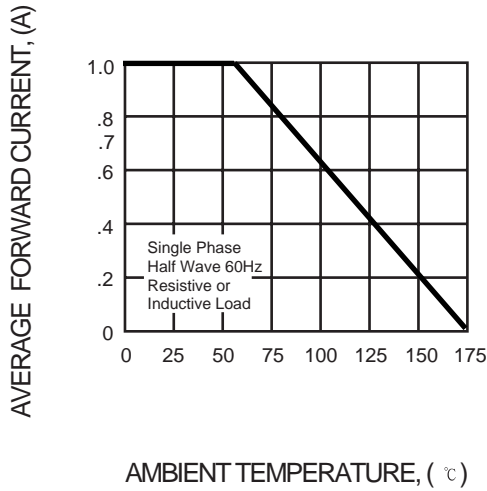


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

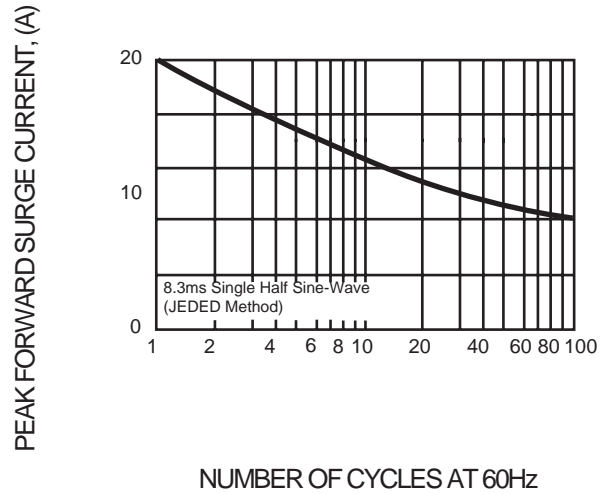


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

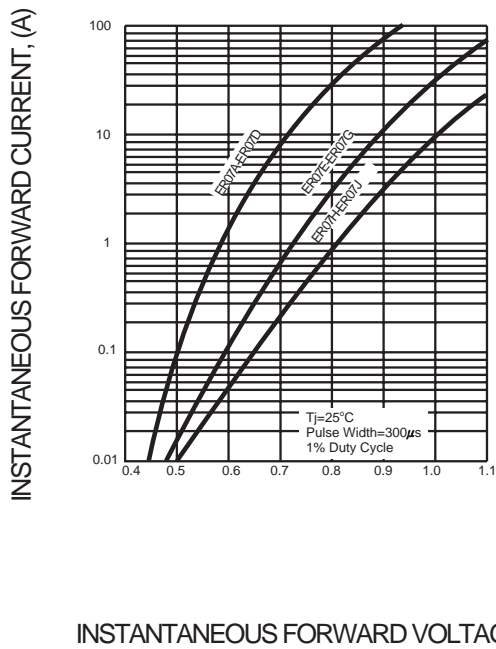
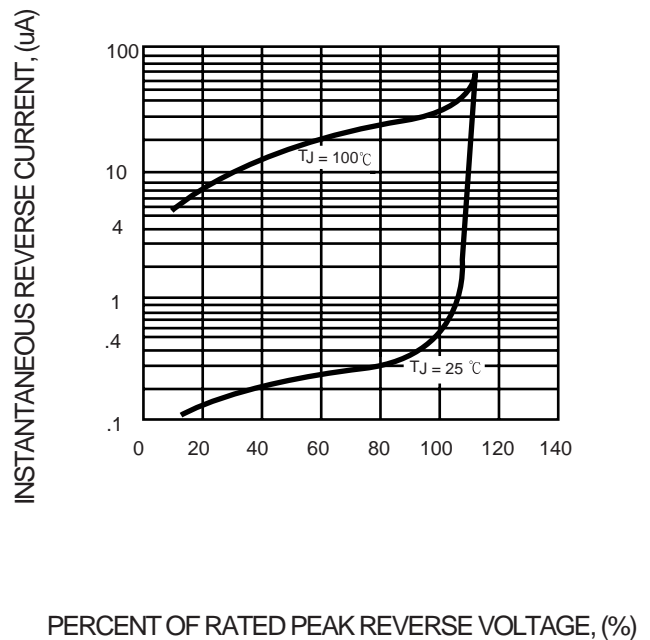


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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