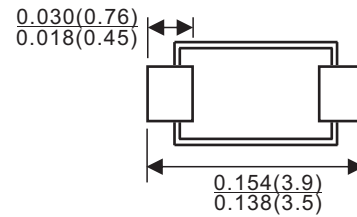
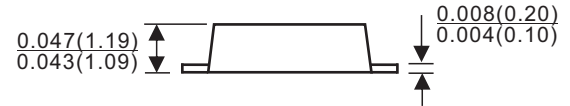
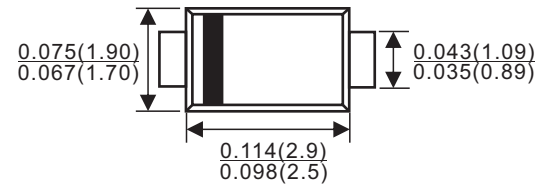




REVERSE VOLTAGE: 50 - 1000 V
CURRENT: 1.0A
SOD-123FL



Dimensions in inches and (millimeters)

Features

- ✧ Low forward surge current
- ✧ Ideal for surface mouted applications
- ✧ Low leakage current

Mechanical Data

- ✧ Case: JEDEC SOD-123FL, molded plastic over passivated chip
- ✧ Polarity: Color band denotes cathode end
- ✧ Weight: 0.006 ounces, 0.02 gram
- ✧ Mounting position: Any

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, derate current by 20%.

ABSOLUTE RATINGS

		U1A	U1B	U1D	U1G	U1J	U1K	U1M	UNITS	
Device marking code		U1A	U1B	U1D	U1G	U1J	U1K	U1M		
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 @ $T_A=75$	$I_{(AV)}$	1.0							A	
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	20							A	
Maximum instantaneous forward voltage @ $I_{FM}=0.7A$ (Note 1)	V_F	1.0		1.4		1.7			V	
Maximum DC reverse current @ $T_A=25$ at rated DC blocking voltage @ $T_A=125$	I_R				10		200			μA
Maximum reverse recovery time (Note 2)	t_{rr}	50			75				ns	
Typical thermal resistance junction to lead	$R_{\theta JA}$	180							/W	
Operating temperature range	T_j	- 55 --- + 150								
Storage temperature range	T_{STG}	- 55 --- + 150								

NOTE 1. Pulse test: pulse width 300 μ sec, duty cycle 2%.
 2. Measured with $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$.

Ratings AND Characteristic Curves

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

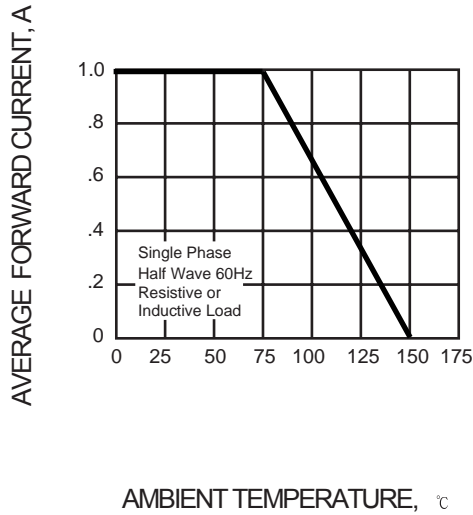


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

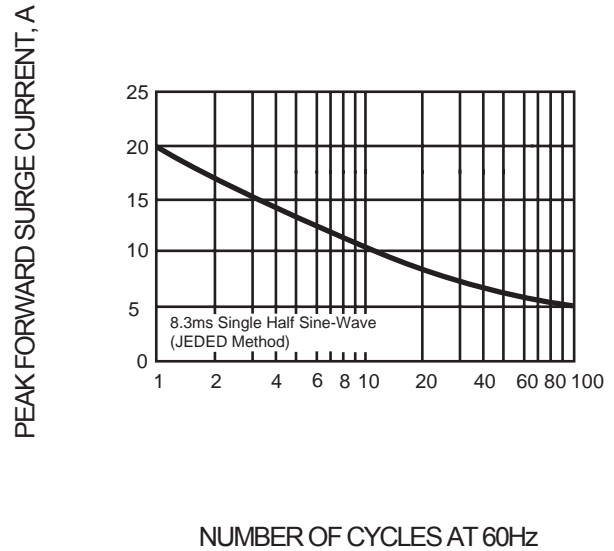


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

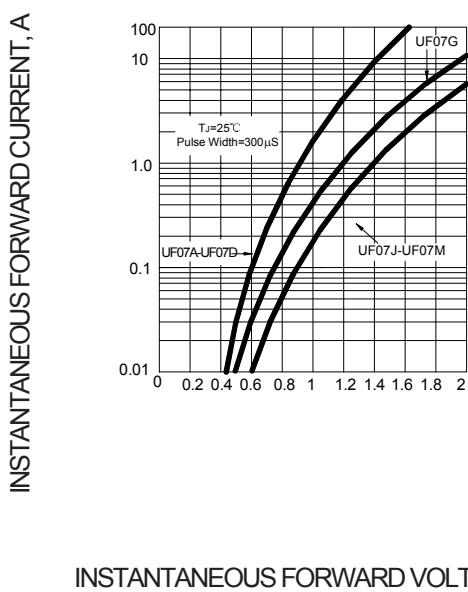
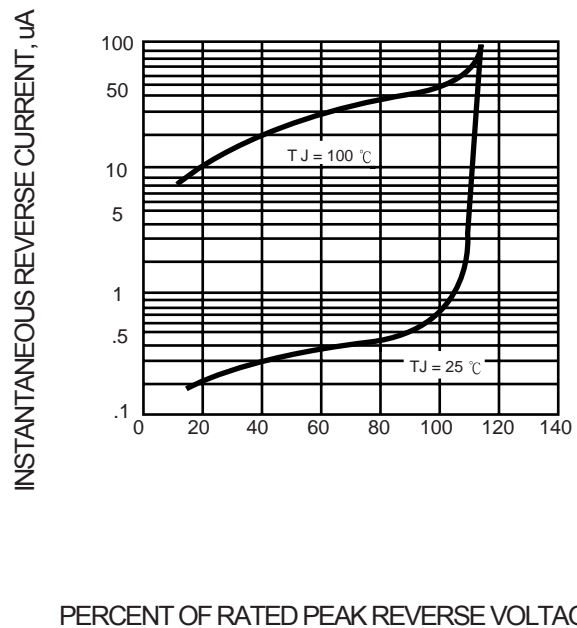


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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