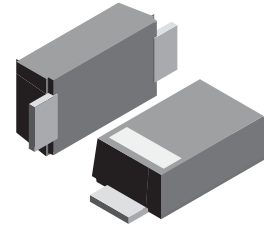


**VOLTAGE RANGE: 50 - 600V**  
**CURRENT: 1.0A**

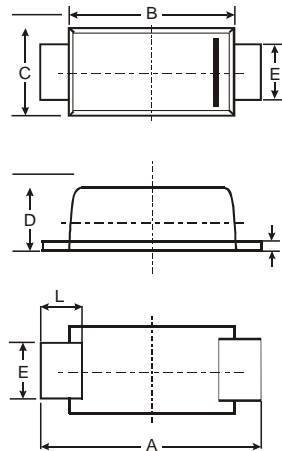
### Features

- Glass passivated device
- Ideal for surface mounted 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: SOD-123FL  
 plastic body over passivated junction
- 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



SOD-123FL			
Dim	Min	Max	Typ
A	3.50	3.80	3.65
B	2.60	2.90	2.75
C	1.70	1.90	1.80
D	0.09	1.10	1.00
E	0.08	1.10	0.095
H	0.12	0.20	0.16
L	0.07	0.09	0.08
All Dimensions in mm			



### Maximum Ratings and Electrical Characteristics TA = 25°C unless otherwise specified

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

Characteristic	Symbol	ER07A	ER07B	ER07C	ER07D	ER07E	ER07G	ER07H	ER07J	Unit	
Maximum repetitive peak reverse voltage	VRRM	50	100	150	200	300	400	500	600	Volts	
Maximum RMS voltage	VRMS	35	70	105	140	210	280	350	420	Volts	
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	150	200	300	400	500	600	Volts	
Maximum average forward rectified current	I(AV)	1.0								Amp	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	25.0								Amps	
Maximum instantaneous forward voltage at 1.0A	VF	0.95			1.25		1.7			Volts	
Maximum DC reverse current at rated DC blocking voltage <small>TA = 25°C</small> <small>TA = 100°C</small>	IR	5.0				100.0				μA	
Maximum reverse recovery time (NOTE 1)	trr	35									ns
Typical junction capacitance (NOTE 2)	CJ	10									pF
Typical thermal resistance (NOTE 3)	R <sub>θJA</sub>	85									K/W
Operating junction and storage temperature range	TJ,STG	-55 to +150								°C	

**Note:** 1. Measured with IF=0.5A, IR=1A, Irr=0.25A.  
 2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 3. PCB mounted on 0.2\*0.2" (5.0\*5.0mm) copper pad area.

## RATINGS AND CHARACTERISTIC CURVES ER07A THRU ER07J

FIG. 1- FORWARD CURRENT DERATING CURVE

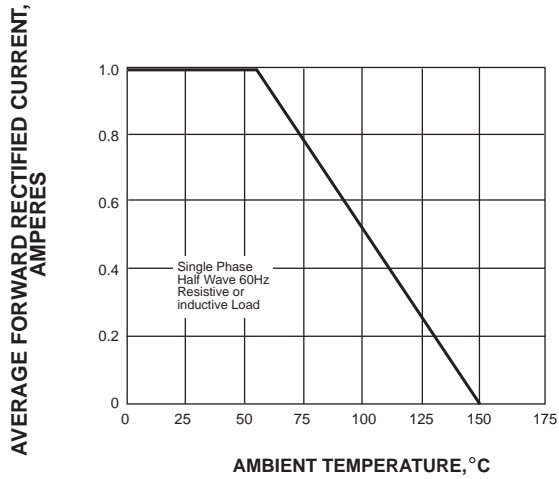


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

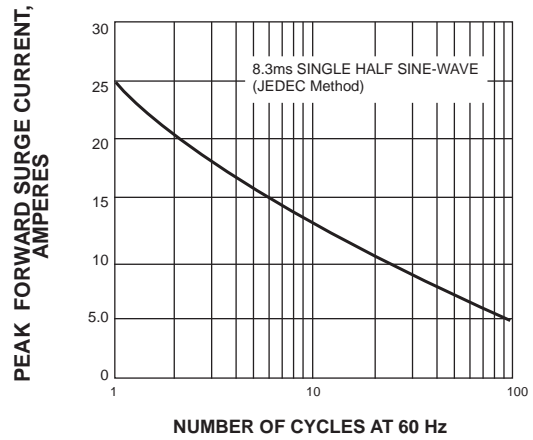


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

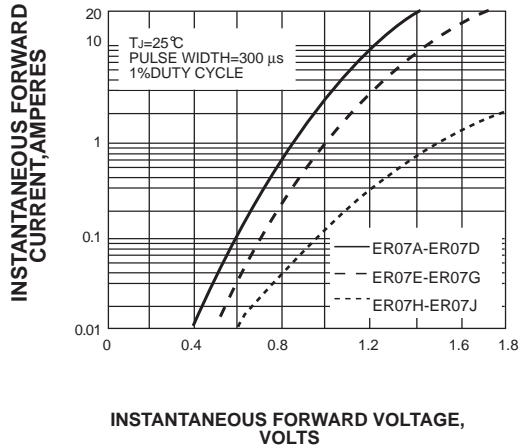


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

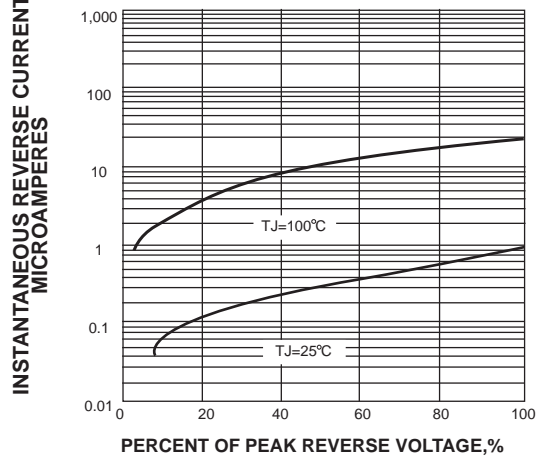


FIG. 5-TYPICAL JUNCTION CAPACITANCE

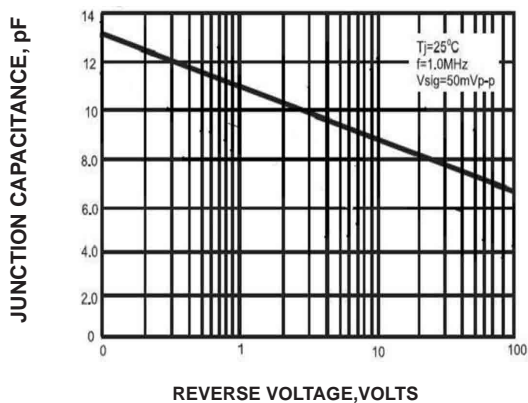


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

