

VOLTAGE RANGE: 50 - 600V

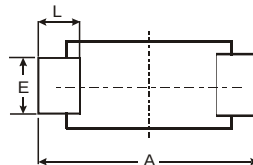
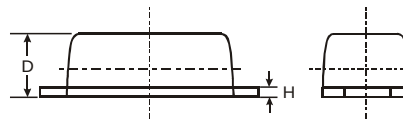
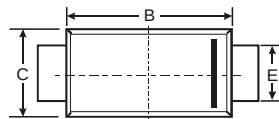
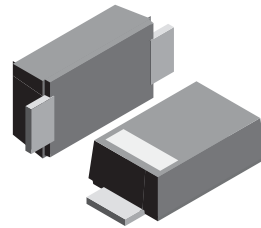
CURRENT: 1.0A

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	3.58	3.72	3.65
B	2.72	2.78	2.75
C	1.77	1.83	1.80
D	1.02	1.08	1.05
E	0.097	1.03	1.00
H	0.13	0.17	0.15
L	0.53	0.57	0.55
All Dimensions in mm			

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

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

	Symbol	DSF1A	DSF1B	DSF1C	DSF1D	DSF1E	DSF1G	DSF1J	Unit
Maximum repetitive peak reverse voltage	VRRM	50	100	150	200	300	400	600	VOLTS
Maximum RMS voltage	VRMS	35	70	105	140	210	280	420	VOLTS
Maximum DC blocking voltage	VDC	50	100	150	200	300	400	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 at1.0A	VF	0.95				1.25		1.7	Volts
Maximum DC reverse current TA =25°C at rated DC blocking voltage TA =100°C	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)	RθJA	85							K/W
Operating junction and storage temperature range	TJTSTG	-55 to +150							°C

Note: 1. Measured with I_F=0.5A, I_R=1A, I_{rr}=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 DSF1A THRU DSF1J

FIG. 1- FORWARD CURRENT DERATING CURVE

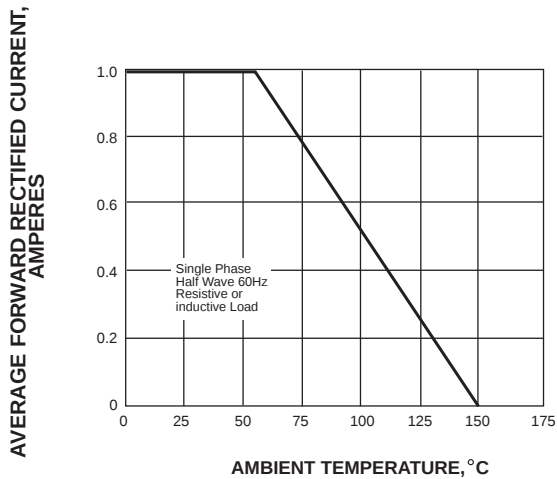


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

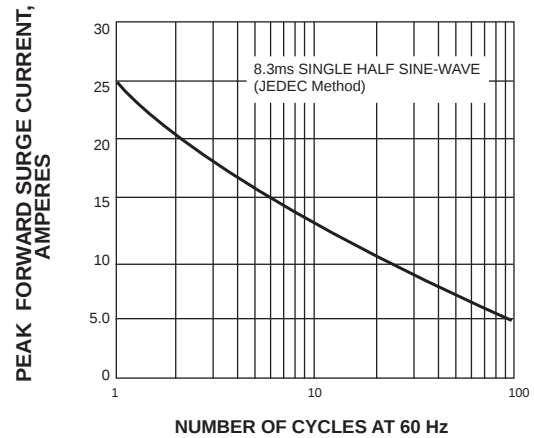


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

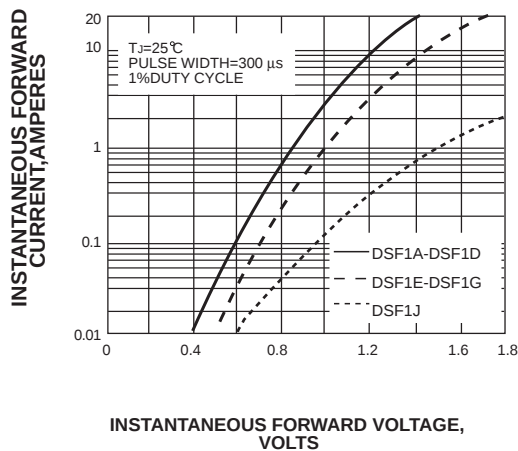


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

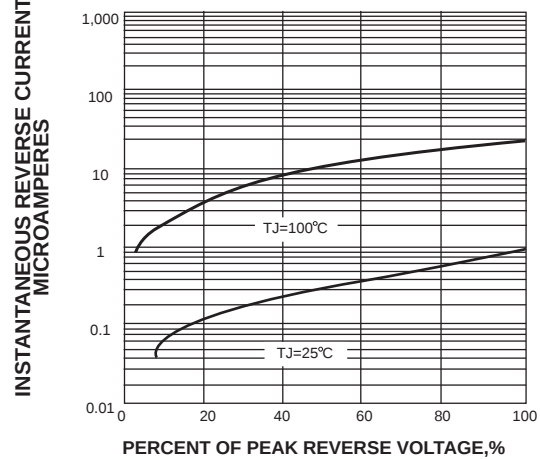


FIG. 5-TYPICAL JUNCTION CAPACITANCE

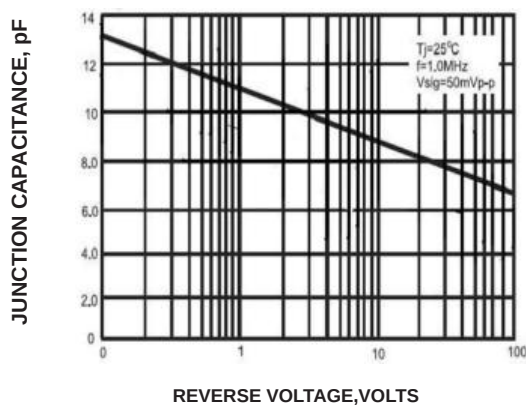


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

