

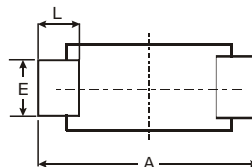
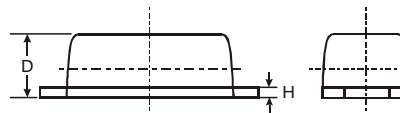
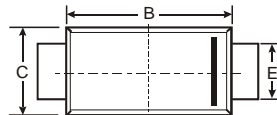
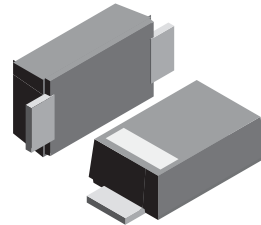
VOLTAGE RANGE: 50 - 1000V
CURRENT: 1.0 A

Features

- For surface mounted applications
- Low profile package
- Ideal for automated placement
- High temperaturesoldering : 260°C /10 seconds at terminals
- Glass Passivated Chip Junction

Mechanical Data

- Case: JEDEC SOD-123FL molded
- plastic body over passivated chip
- 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%.

Characteristic	Symbol	GS1000FL	GS1002FL	GS1003FL	GS1004FL	GS1006FL	GS1008FL	GS1010FL	Unit
	Marking	S1A	S1B	S1D	S1G	S1J	S1K	S1M	
Maximum repetitive 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 at T _A =65°C (NOTE 1)	I _(AV)	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) T _L =25°C	I _{FSM}	25.0							A
Maximum instantaneous forward voltage at 1.0A	V _F	1.1							V
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =125°C	I _R	10.0 50.0							μA
Typical junction capacitance (NOTE 2)	C _J	4							pF
Typical thermal resistance (NOTE 3)	R _{θJA}	65							K/W
Operating junction and storage temperature range	T _J , T _{STG}	-50 to +150							°C

- Note:** 1. Averaged over any 20ms period.
 2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 3. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

RATING AND CHARACTERISTIC CURVES

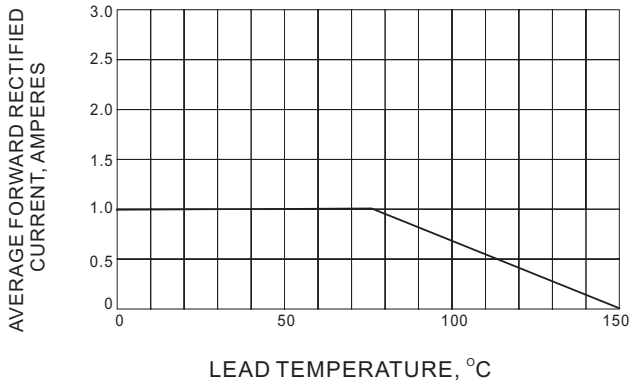
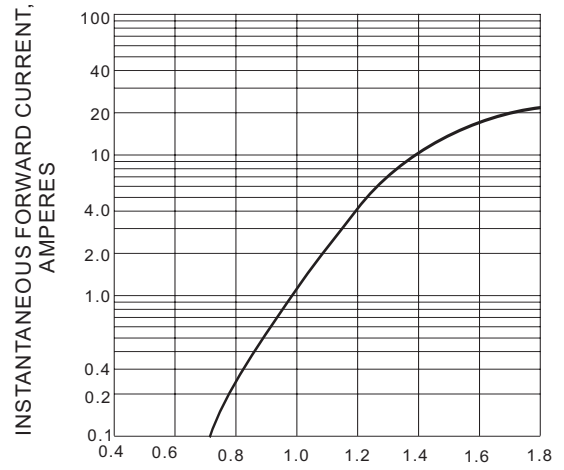


Fig. 1 FORWARD CURRENT DERATING CURVE



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

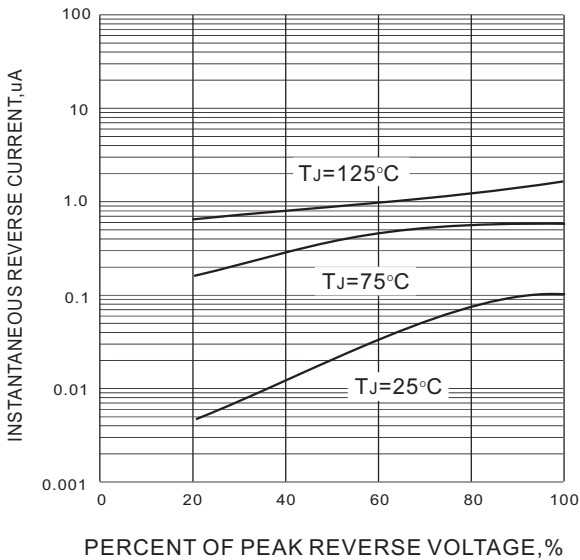


Fig. 3 TYPICAL REVERSE CHARACTERISTICS

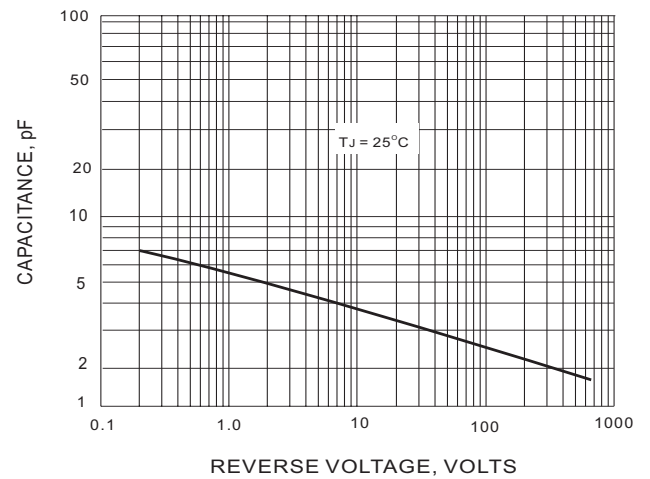


Fig. 4 TYPICAL JUNCTION CAPACITANCE