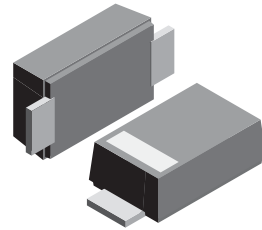


VOLTAGE RANGE: 20 V
CURRENT: 1.0 A

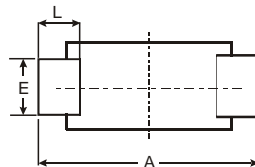
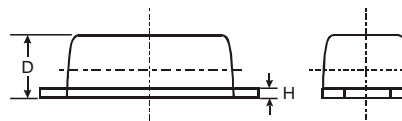
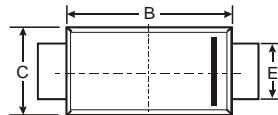


Features

- Guardring for stress protection
- Optimized for very low forward voltage
- In compliance with EU
- RoHS 2002/95/EC directives

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 $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Rating	Symbol	value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	20	V
Average Rectified Forward Current (At Rated $V_R, T_L=115^\circ\text{C}$)	I_O	1.0	A
Non-Repetitive Peak Surge Current (Non-Repetitive peakcurrent, halfwave, singlephase, 60Hz)	I_{FSM}	50	A
voltage Rate of Change (Rated $V_R, T_J=25^\circ\text{C}$)	dv/dt	10,000	V/ μs
Storage Temperature	T_{STG}	-55 to + 150	$^\circ\text{C}$
Operating Junction Temperature	T_J	-55 to + 125	$^\circ\text{C}$

Characteristic	Symbol	$T_J=25^\circ\text{C}$	$T_J=85^\circ\text{C}$	Unit
Maximum Instantaneous Forward Voltage (Note3), See Figure 2 $I_F=0.1\text{A}$ $I_F=1.0\text{A}$ $I_F=3.0\text{A}$	V_F	0.340 0.450 0.650	0.260 0.415 0.670	V
Maximum Instantaneous Reverse Current (Note3), See Figure 4 ($V_R=20\text{V}$) ($V_R=10\text{V}$)	I_R	0.40 0.10	25 18	mA

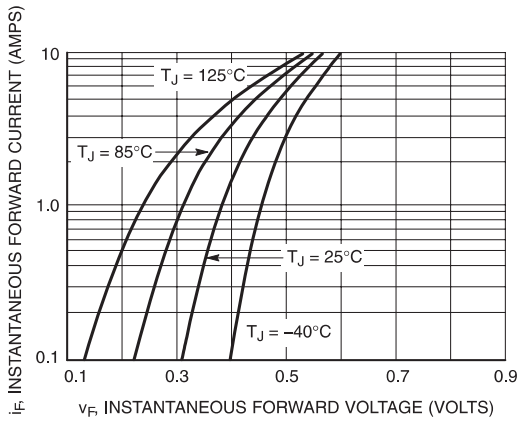


Figure 1. Typical Forward Voltage

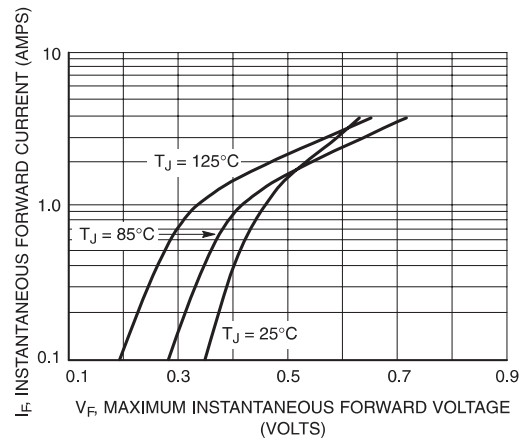


Figure 2. Maximum Forward Voltage

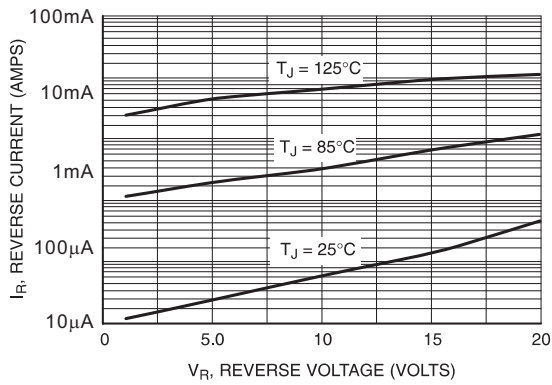


Figure 3. Typical Reverse Current

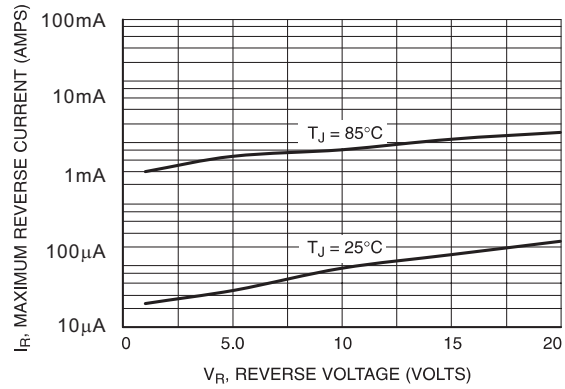


Figure 4. Maximum Reverse Current

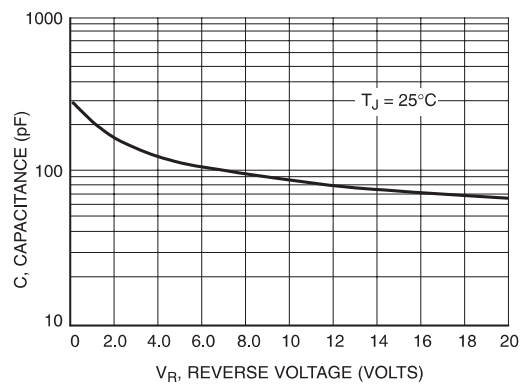


Figure 5. Capacitance