

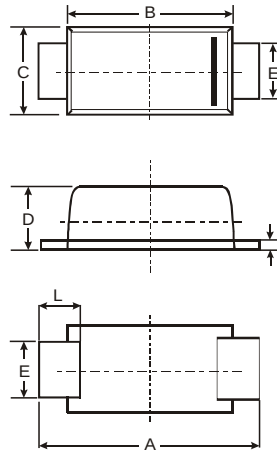
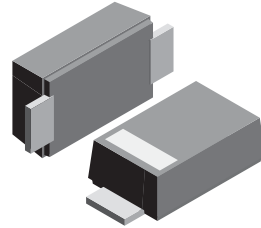
VOLTAGE RANGE: 200 - 600V
CURRENT: 1.0 A

Features

- Glass passivated device
- Ideal for surface mounted applications
- Low reverse leakage
- Metallurgically bonded construction

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%.

Characteristic	Symbol	DFLR1200	DFLR1400	DFLR1600	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	200	400	600	V
Working Peak Reverse Voltage	V _{RWM}				
DC Blocking Voltage	V _R				
RMS Reverse Voltage	V _{R(RMS)}	140	280	420	V
Average Rectified Output Current (see figure 4)	I _O	1.0			A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load	I _{FSM}	25			A
Forward Voltage @ I _F = 1.0A	V _{FM}	1.1			V
Peak Reverse Leakage Current @ T _A = 25 °C	I _{RM}	3.0			A
at Rated DC Blocking Voltage @ T _A = 125 °C					
Typical Total Capacitance (f = 1MHz, V _R = 4.0VDC)	C _T	10			pF

Thermal Characteristics

Characteristic	Symbol	Typ	Max	Unit
Thermal Resistance, Junction to Ambient Air (Note 1)	R _{JA}	134		°C/W
Thermal Resistance, Junction to Soldering Point (Note 3)	R _{JS}		6	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}		-65 to +150	°C

- Notes: 1. Device mounted on 1" x 1", FR-4 PCB; 2 oz. Cu pad layout as shown on Diodes Inc. suggested pad layout document AP02001.pdf. T_A = 25 °C
2. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see *EU Directive Annex Notes 5 and 7*.
3. Theoretical R_{JS} calculated from the top center of the die straight down to the PCB/cathode tab solder junction.

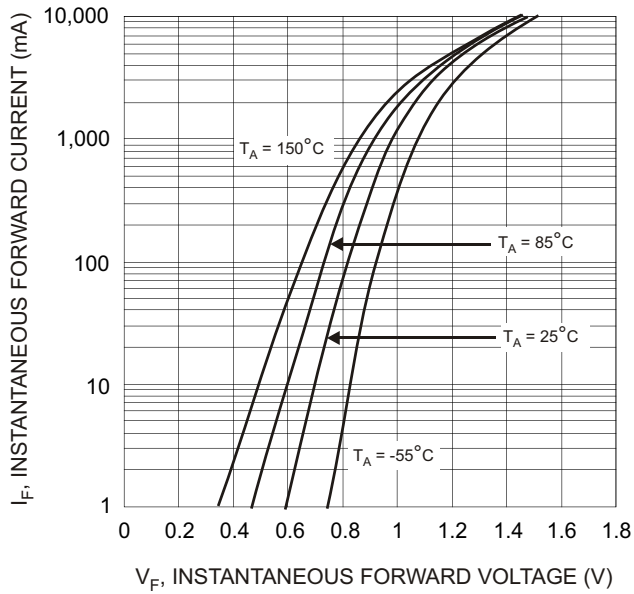


Fig. 1 Typical Forward Characteristics

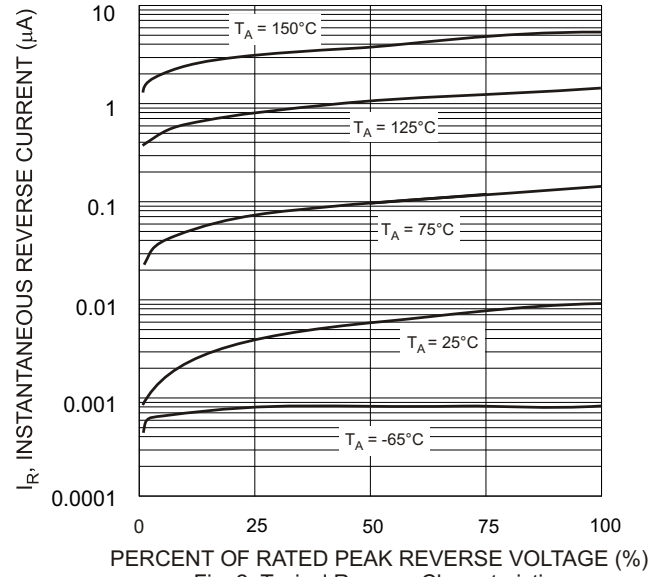


Fig. 2 Typical Reverse Characteristics

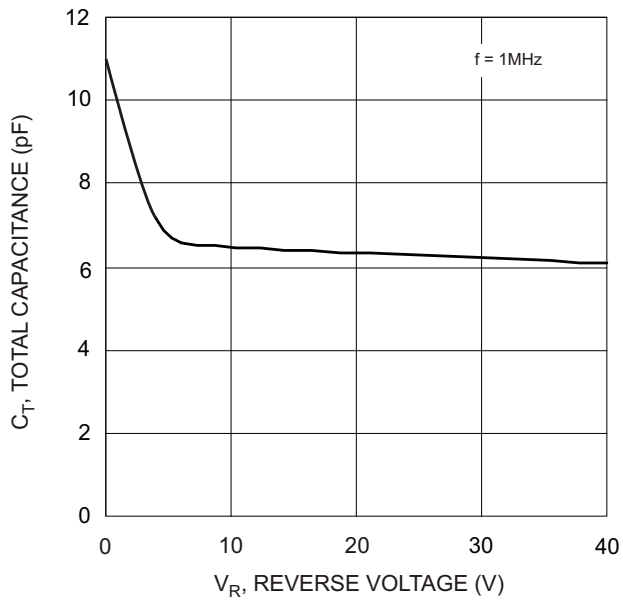


Fig. 3 Typical Total Capacitance

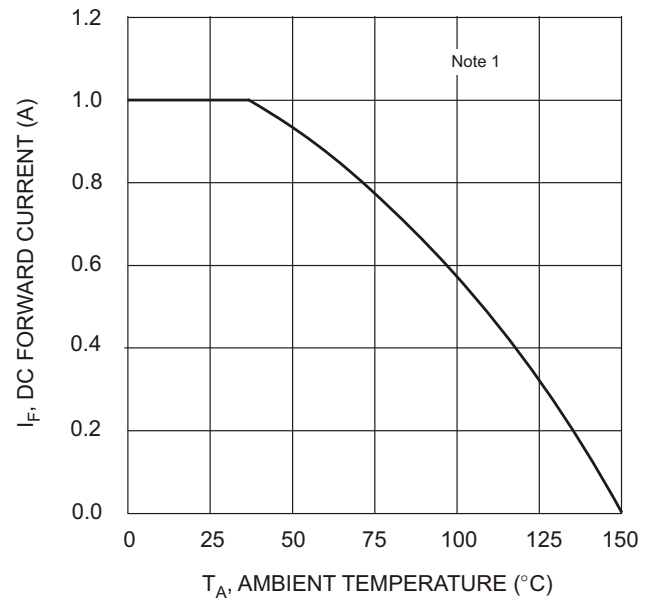


Fig. 4 DC Forward Current Derating