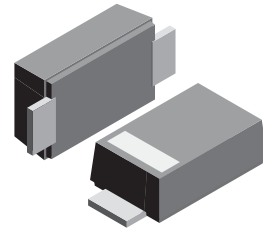


VOLTAGE RANGE: 200 - 600V
CURRENT: 1.0 A

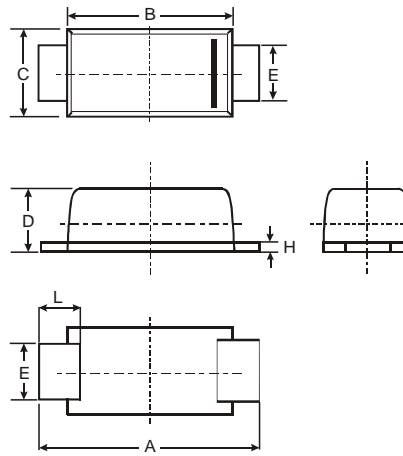


Features

- 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 Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	200	400	600	V
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 @ $T_A = 25 C$ at Rated DC Blocking Voltage @ $T_A = 125 C$	I_{RM}		3.0 100		A
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.

