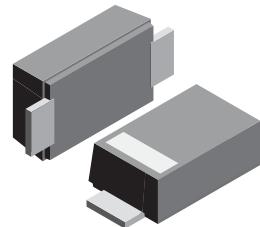


VOLTAGE RANGE: 40V

CURRENT: 1.0 A

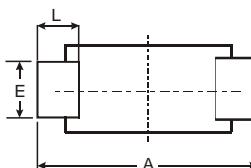
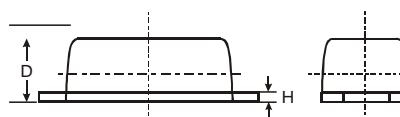
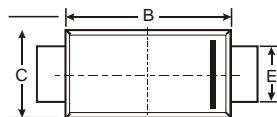
Features

- Guard Ring Die Construction for
- Transient Protection
- Very Low Leakage Current
- Low Forward Voltage Drop



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
- Type Code: LO
- Weight:0.0007 ounce, 0.02 grams



SOD-123FL			
Dim	Min	Max	Typ
A	3.50	3.80	3.65
B	2.60	2.90	2.75
C	1.70	1.90	1.80
D	0.09	1.10	1.00
E	0.08	1.10	0.095
H	0.12	0.20	0.16
L	0.07	0.09	0.08

All Dimensions in mm

Maximum Ratings

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

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

Characteristic	Symbol	Value			Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40			V
RMS Reverse Voltage	$V_{R(\text{RMS})}$	28			V
Average Forward Current (See Figure 1)	$I_{F(\text{AV})}$	1.0			A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	6.6			A
Repetitive Peak Reverse Current $t_p = 2\mu\text{s}$ square wave, $f = 1\text{KHz}$	I_{RRM}	0.5			A
Non-Repetitive Peak Reverse Current $t_p = 100\mu\text{s}$ square wave	I_{RSM}	1.0			A
Power Dissipation	P_d	350 410			mW
Typical Thermal Resistance Junction to Ambient	R_{JA}	360 305			°C/W
Operating Temperature Range	T_j	-65 to +125			°C
Storage Temperature Range	T_{STG}	-65 to +125			°C

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 1)	$V_{(BR)R}$	40			V	$I_R = 40\mu\text{A}$
Forward Voltage	V_F		0.48	0.55 0.51	V	$I_F = 1\text{A}, T_J = 25^\circ\text{C}$ $I_F = 1\text{A}, T_J = 100^\circ\text{C}$
Leakage Current (Note 1)	I_R		0.2	10 40 5	μA μA mA	$V_R = 5\text{V}, T_J = 25^\circ\text{C}$ $V_R = 40\text{V}, T_J = 25^\circ\text{C}$ $V_R = 40\text{V}, T_A = 100^\circ\text{C}$

