

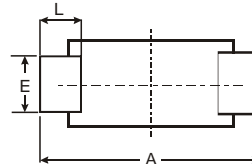
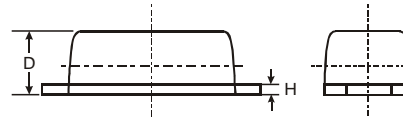
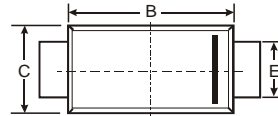
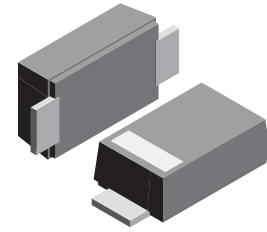
VOLTAGE RANGE: 100V
CURRENT: 100mA

Features

- or general purpose applications
- This diode features low turn-on voltage and high breakdown voltage. This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges

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	Value	Unit
Continuous reverse voltage	V _{RRM}	100	V
Forward continuous current @ T _A =25°C	I _F	100 ¹⁾	mA
Repetitive peak forward current tp 1s, 0.5	I _{FRM}	350 ¹⁾	mA
Surge forward current @ tp 10ms	I _{FSM}	750 ¹⁾	mA
Power dissipation @ T _A =95°C	P _{tot}	100 ¹⁾	mW
Junction temperature	T _J	-55 ----+ 125	°C
Ambient operating temperature range	T _L	230	°C
Storage temperature range	T _{STG}	-55 ----+ 150	°C

1) On infinite heatsink with 4mm lead length.

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse breakdown voltage @ I _R =100μA, T _J =25°C	V _{BR}	100	-	-	V
Forward voltage @ I _F =1mA, T _J =25°C	V _F	-	0.4	0.45	V
@ I _F =200mA, T _J =25°C		-	-	1.0	
Leakage current @ T _J =25°C	I _R	-	-	0.1	μA
VR=50V @ T _J =100°C		-	-	20	
Junction capacitance at VR=1V, f=1MHz	C _J	-	-	20	pF
Thermal resistance junction to ambient	R _{θJA}	-	-	300 ¹⁾	°C/W

2) Pulse test tp < 300 μs.

FIG.1 – ADMISSIBLE POWER DISSIPATION VS. AMBIENT TEMPERATURE

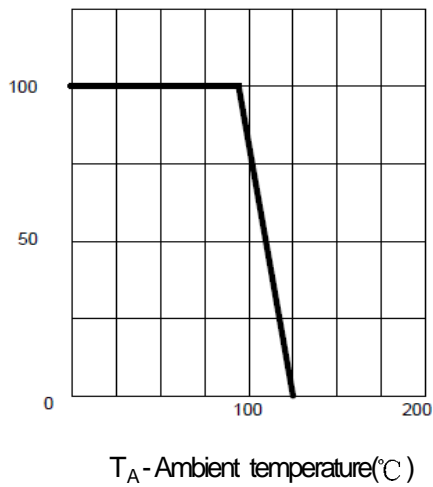


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

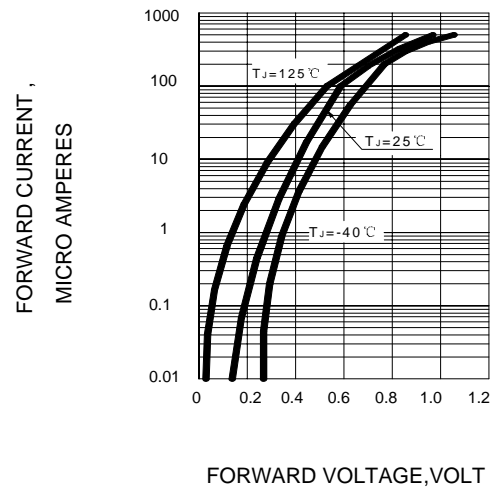


FIG.3 – TYPICAL REVERSE CHARACTERISTICS

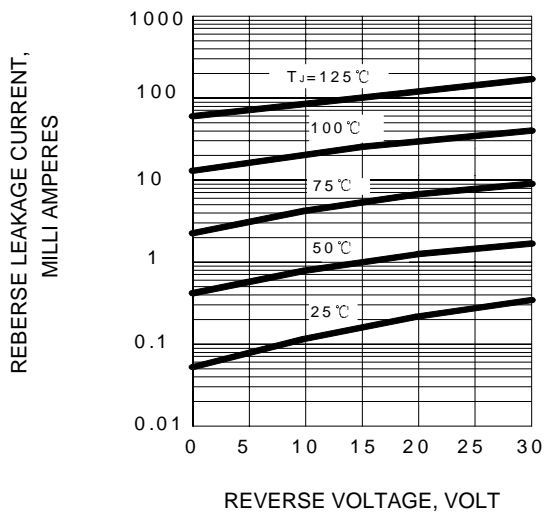


FIG.4 – TYPICAL JUNCTION CAPACITANCE

