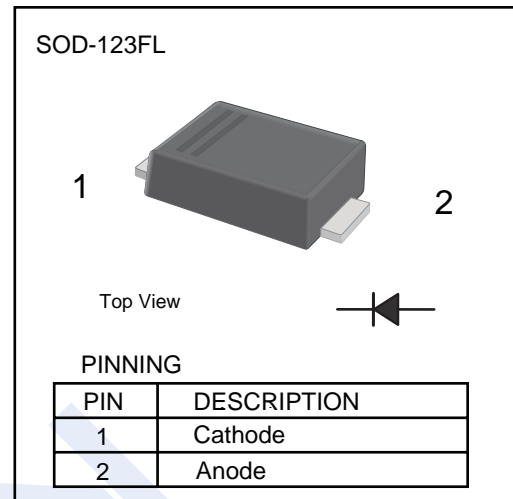


General Purpose Rectifier

DSR1A ~ DSR1M

■ Features

- Reverse Voltage – 50 to 1000 V
- Forward Current – 1 A
- Glass passivated device
- Ideal for surface mounted applications
- Low reverse leakage
- Metallurgically bonded construction



■ Absolute Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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

Parameter	Symbol	DSR1A	DSR1B	DSR1D	DSR1G	DSR1J	DSR1K	DSR1M	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum Surge Peak Reverse Voltage	V_{RSM}	35	70	140	280	420	560	700	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	
Maximum Instantaneous Forward Voltage at 1A	V_F	1.1							A
Averaged Forward Current (Note 1) $T_A=65^\circ\text{C}$	$I_{F(AV)}$	1							
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method) $T_L=25^\circ\text{C}$	I_{FSM}	25							μA
Maximum DC Reverse Current $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=125^\circ\text{C}$	I_R	10 50							
Typical Junction Capacitance (Note 2)	C_j	4							pF
Typical Thermal Resistance (Note 3)	R_{thJA}	180							°C/W
Junction Temperature	T_j	150							°C
Storage Temperature	T_{stg}	-55 to 150							

Note 1: Averaged over any 20ms period.

2: Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3: PCB mounted on 5.0*5.0mm copper pad area.

■ Marking

NO.	DSR1A	DSR1B	DSR1D	DSR1G	DSR1J	DSR1K	DSR1M
Marking	S1A	S1B	S1D	S1G	S1J	S1K	S1M

General Purpose Rectifier

DSR1A ~ DSR1M

■ Typical Characteristics

FIG.1 – TYPICAL FORWARD CHARACTERISTIC

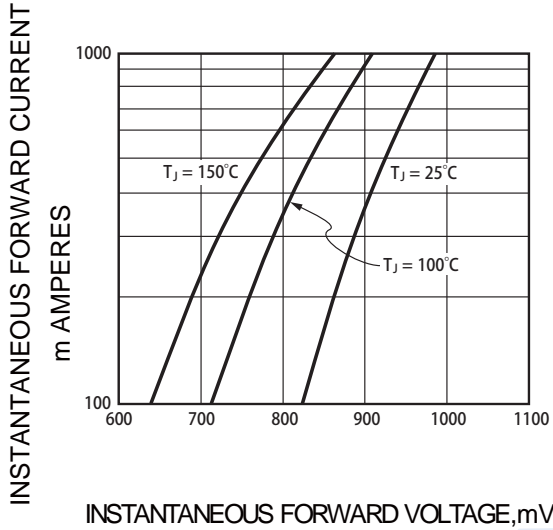


FIG.2 – TYPICAL JUNCTION CAPACITANCE

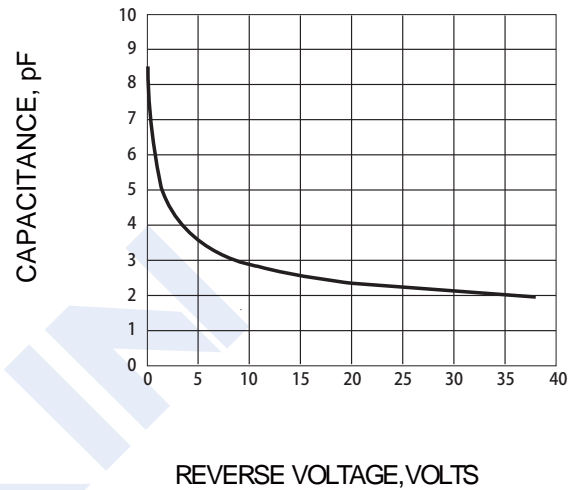


FIG.3 – TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

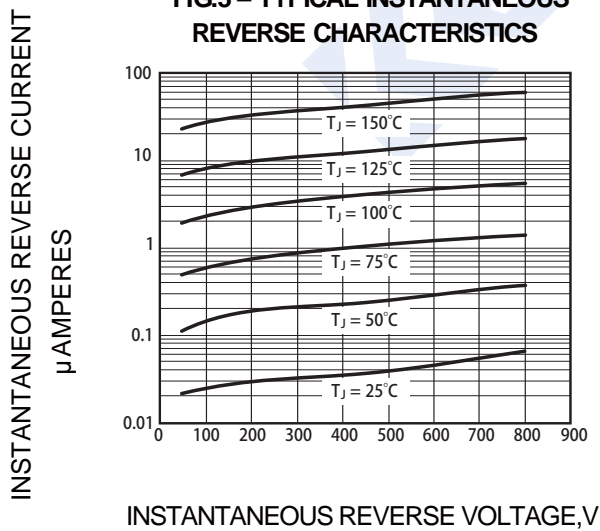
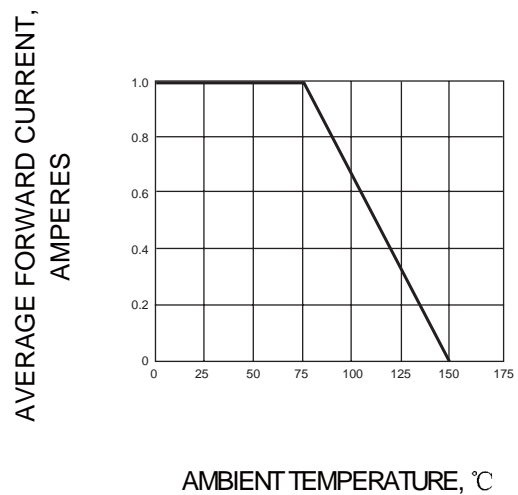


FIG.4 – FORWARD DERATING CURVE



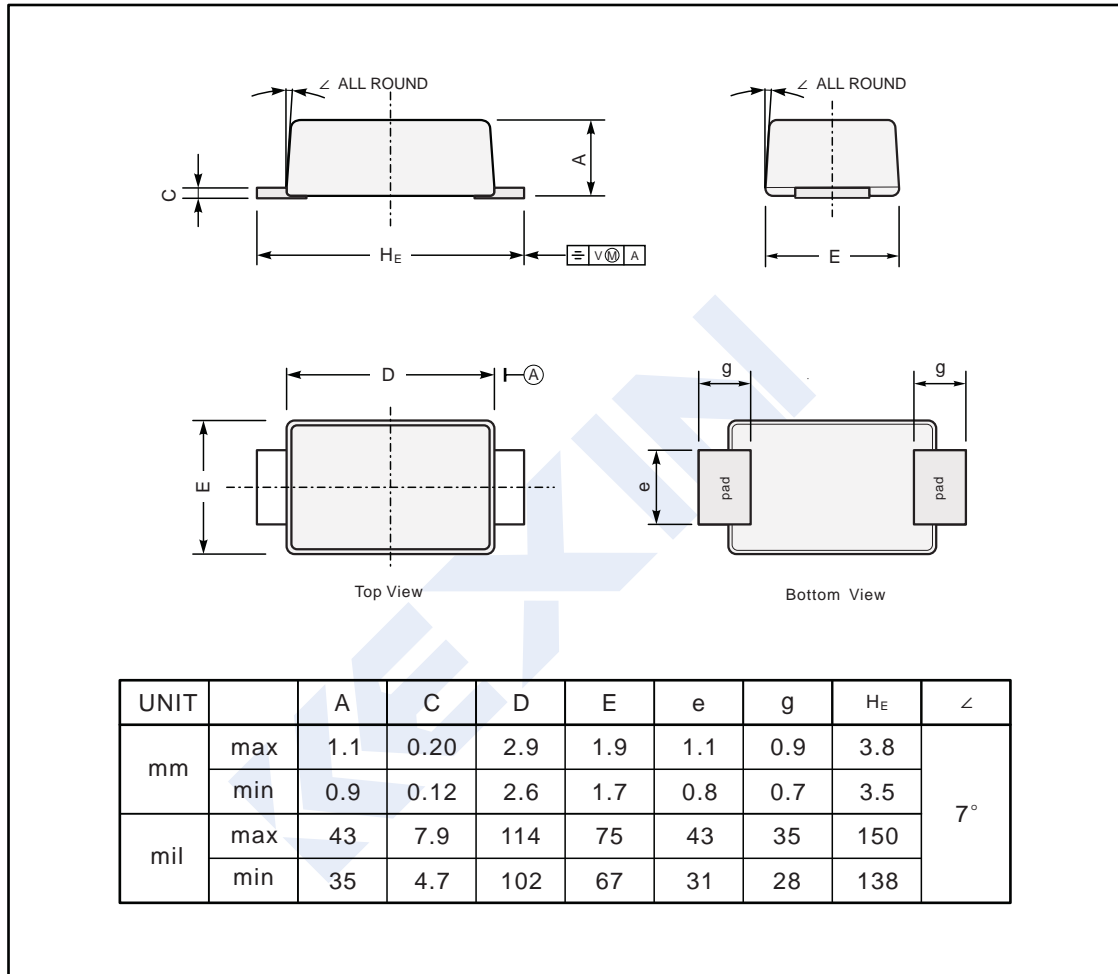
General Purpose Rectifier

DSR1A ~ DSR1M

■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SOD-123FL



■ The Recommended Mounting Pad Size

