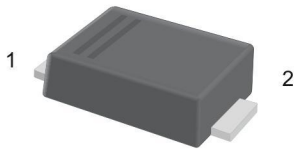
1N4001FL~1N4007FL
Surface Mount General Purpose Silicon Rectifiers

Features

- For surface mount applications
- Glass passivated chip junction
- Low profile package
- High efficiency
- Lead free in comply with EU RoHS 2011/65/EU directive

SOD-123FL



Marking Code:

1N4001FL: A1
1N4002FL: A2
1N4003FL: A3
1N4004FL: A4
1N4005FL: A5
1N4006FL: A6
1N4007FL: A7

Maximum Ratings and Electrical Characteristics

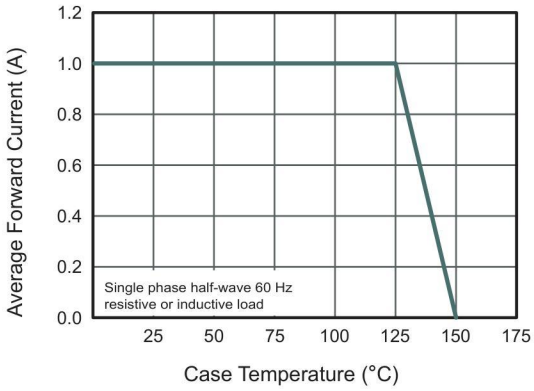
Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

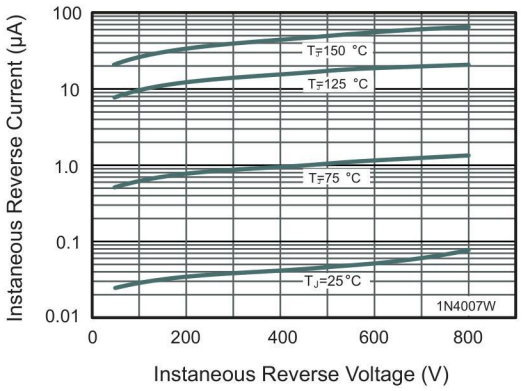
Parameter	Symbols	1N4001FL	1N4002FL	1N4003FL	1N4004FL	1N4005FL	1N4006FL	1N4007FL	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T_C =125°C	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1 A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A = 25°C T_A = 125°C	I_R	5 50							μA
Typical Junction Capacitance Note1	C_j	11							pF
Typical Thermal Resistance Note2	$R_{\theta JA}$	90							°C/W
Junction Temperature	T_J	150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

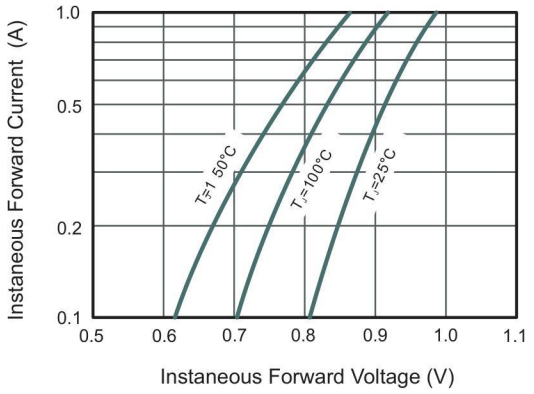
Note:

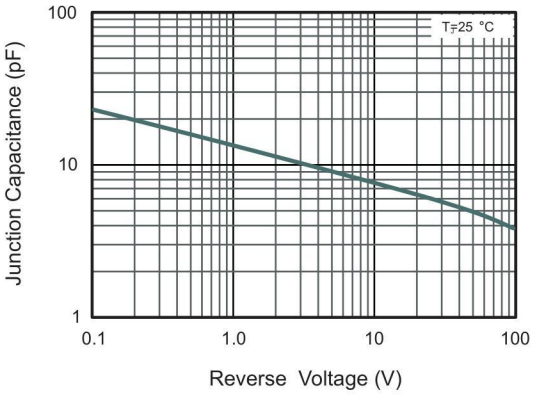
1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

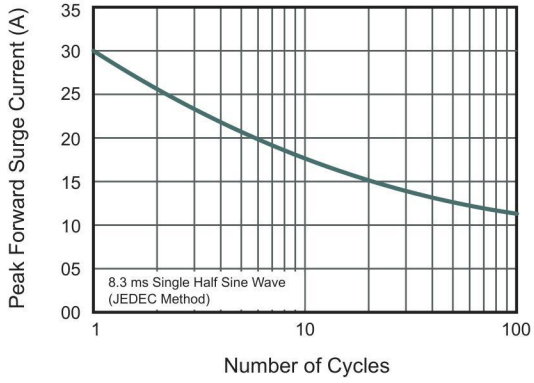
Typical Characteristic Curves







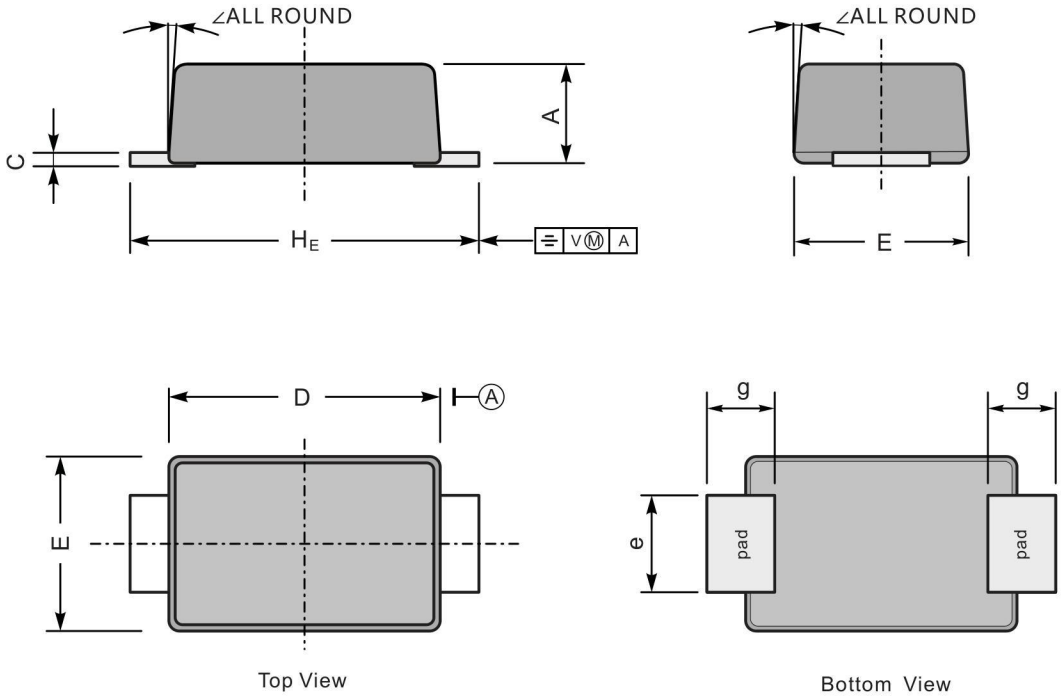




Package Outline

SOD-123FL

Dimensions in mm



UNIT		A	C	D	E	e	g	E_H	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	