

Features

- For surface mount applications
- High forward surge current capability
- Low power loss, high efficiency
- Metal silicon junction, majority carriers conduction

SOD-123FL



1.Cathode  2.Anode

Marking Code :

1N5817FL: 12A
1N5818FL: 13A
1N5819FL: 14A

Maximum Ratings and Electrical Characteristics

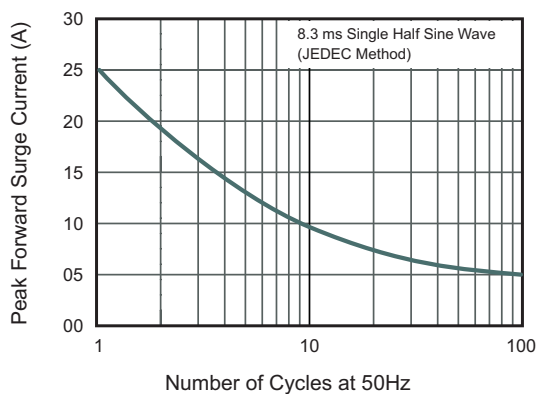
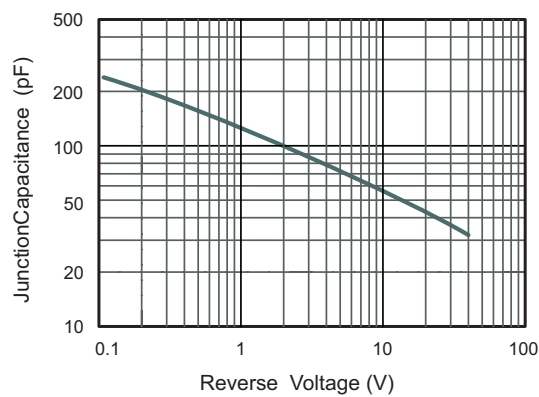
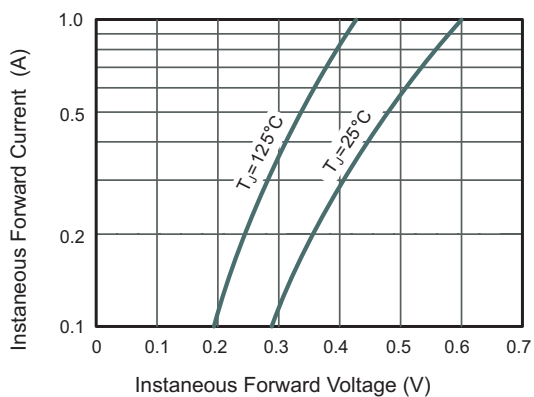
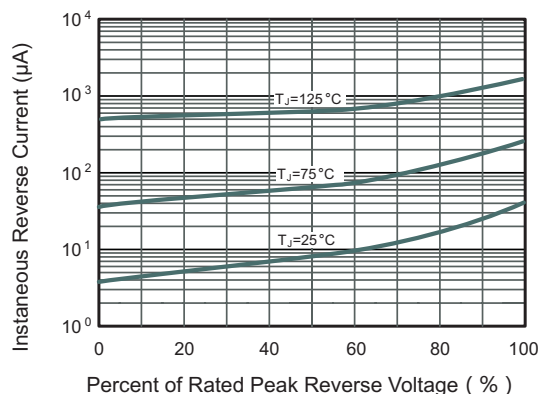
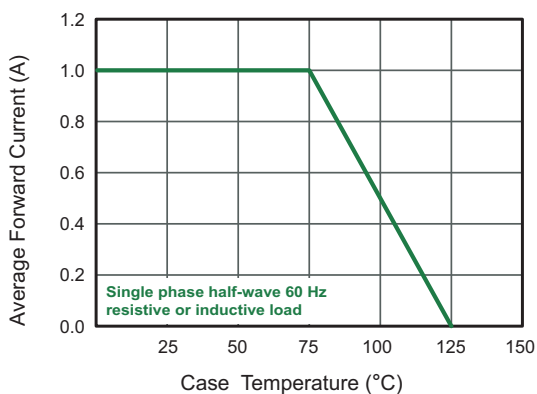
Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	1N5817FL	1N5818FL	1N5819FL	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Maximum Average Forward Rectified Current at $T_C = 75^\circ\text{C}$	$I_{F(AV)}$	1.0			A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	25			A
Maximum Instantaneous Forward Voltage at 1 A at 3 A	V_F	0.45 0.75	0.55 0.875	0.6 0.9	V
Maximum DC Reverse Current at Rated DC Blocking Voltage at $T_A = 25^\circ\text{C}$ at $T_A = 100^\circ\text{C}$	I_R	1 10			mA
Typical Junction Capacitance ^{Note1}	C_j	110			pF
Operating Junction Temperature	T_J	150			$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150			$^\circ\text{C}$

Note:

1. Measured at 1 MHz and applied reverse voltage of 4 V DC.

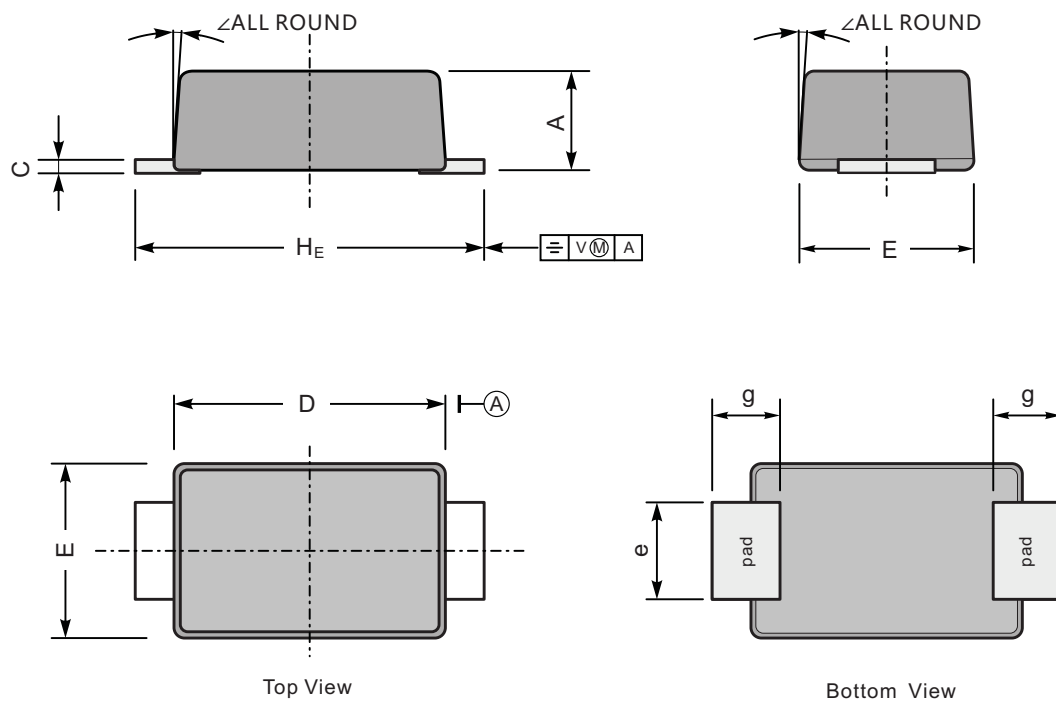
Typical Characteristic Curves



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	