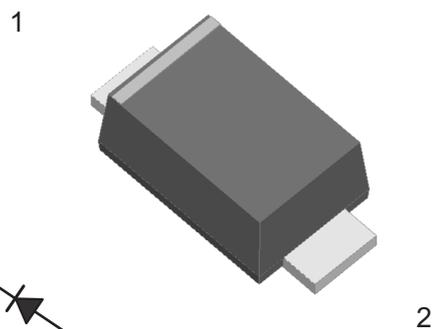


FEATURES

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Fast reverse recovery time
- Lead free in comply with EU RoHS 2011/65/EU directives



PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

MECHANICAL DATA

- Case: SOD-123FL
- Terminals: Solderable per MIL-STD-750, Method 2026

Absolute Maximum Ratings and Characteristics

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

Parameter	Symbols	F1	F2	F3	F4	F5	F6	F7	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 @ Fig.1	$I_{F(AV)}$	1							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30							A
I^2t Rating for fusing (3ms ≤ t ≤ 8.3ms)	I^2t	3.7							A ² S
Max Instantaneous Forward Voltage at 1 A	V_F	1.3							V
Maximum DC Reverse Current at Rated DC Reverse Voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	I_R	5 100							μA
Maximum Reverse Recovery Time ⁽¹⁾	t_{rr}	150				250	500		ns
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							°C

(1) Measured with $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$.

Fig.1 Forward Current Derating Curve

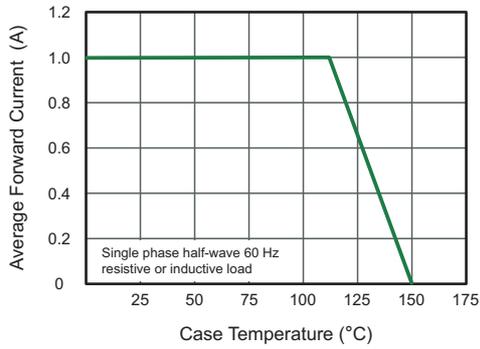


Fig.2 Typical Reverse Characteristics

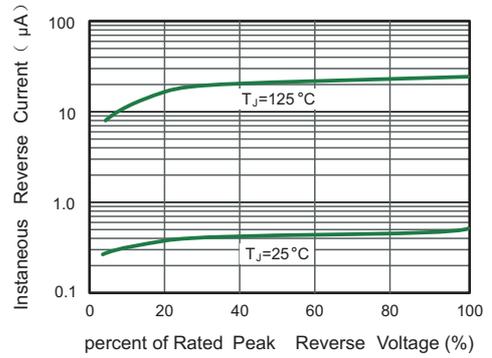


Fig.3 Typical Instantaneous Forward Characteristics

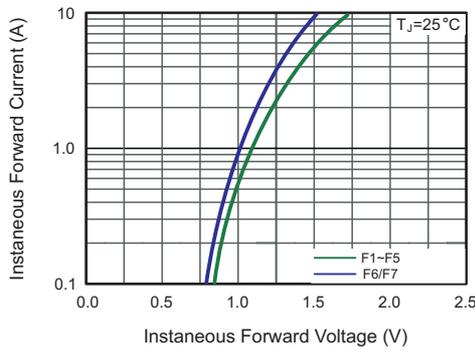
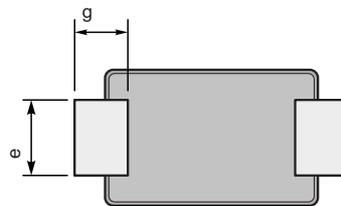
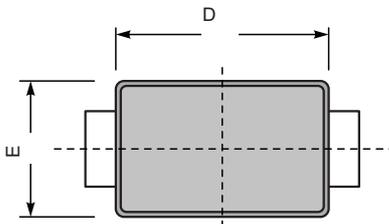
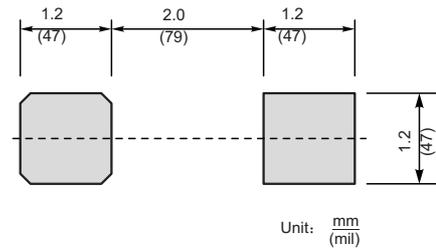
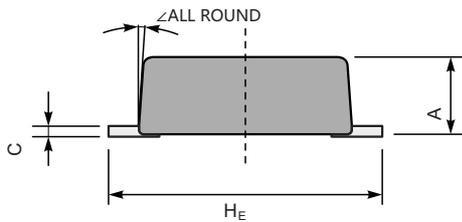
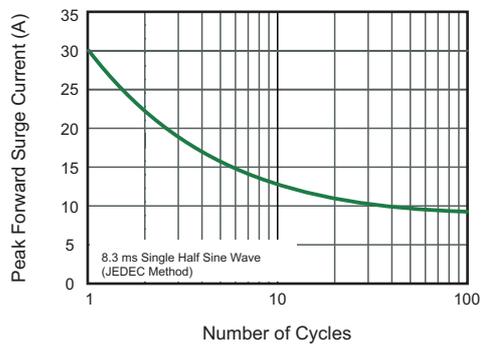


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Top View

Bottom View

UNIT		A	C	D	E	e	g	H _E	∠
mm	max	1.2	0.20	2.9	1.9	1.1	0.8	3.8	6°
	min	0.9	0.12	2.6	1.7	0.8	0.5	3.5	
mil	max	47	7.9	114	75	43	31	150	
	min	35	4.7	102	67	31	19	138	

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