

FEATURES

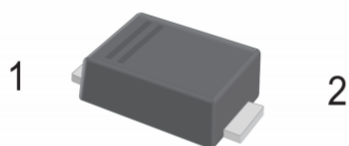
- Metal silicon junction, majority carrier conduction
- Guarding for overvoltage protection
- Low power loss, high efficiency
- High current capability
- low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- Case: SOD-123FL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 15mg 0.00048oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View

SOD-123FL

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	1N5817W	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	V
Maximum RMS voltage	V_{RMS}	14	V
Maximum DC Blocking Voltage	V_{DC}	20	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current, 8.3ms 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	V
Maximum Instantaneous Reverse Current at $T_A = 25^{\circ}C$ Rated DC Reverse Voltage $T_A = 100^{\circ}C$	I_R	1 10	mA
Typical Junction Capacitance	C_j	110	pF
Storage and Operating Junction Temperature Range	T_j, T_{stg}	-55 ~ +150	$^{\circ}C$

Fig.1 Forward Current Derating Curve

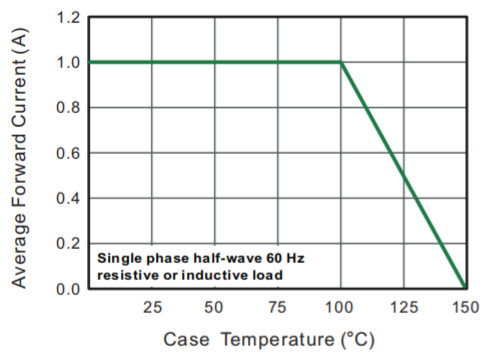


Fig.2 Typical Reverse Characteristics

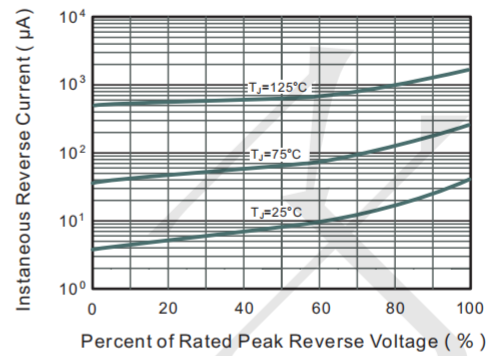


Fig.3 Typical Forward Characteristic

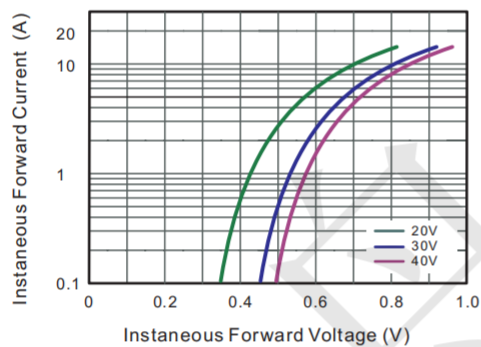


Fig.4 Typical Junction Capacitance

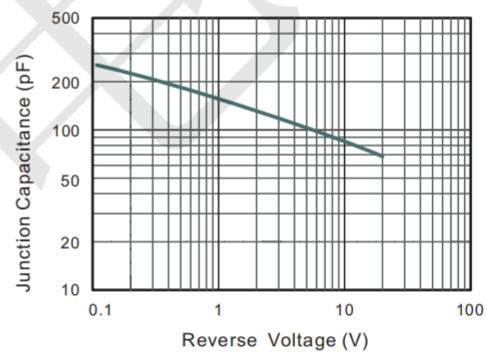
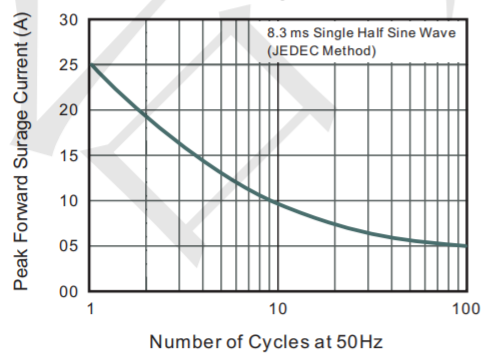
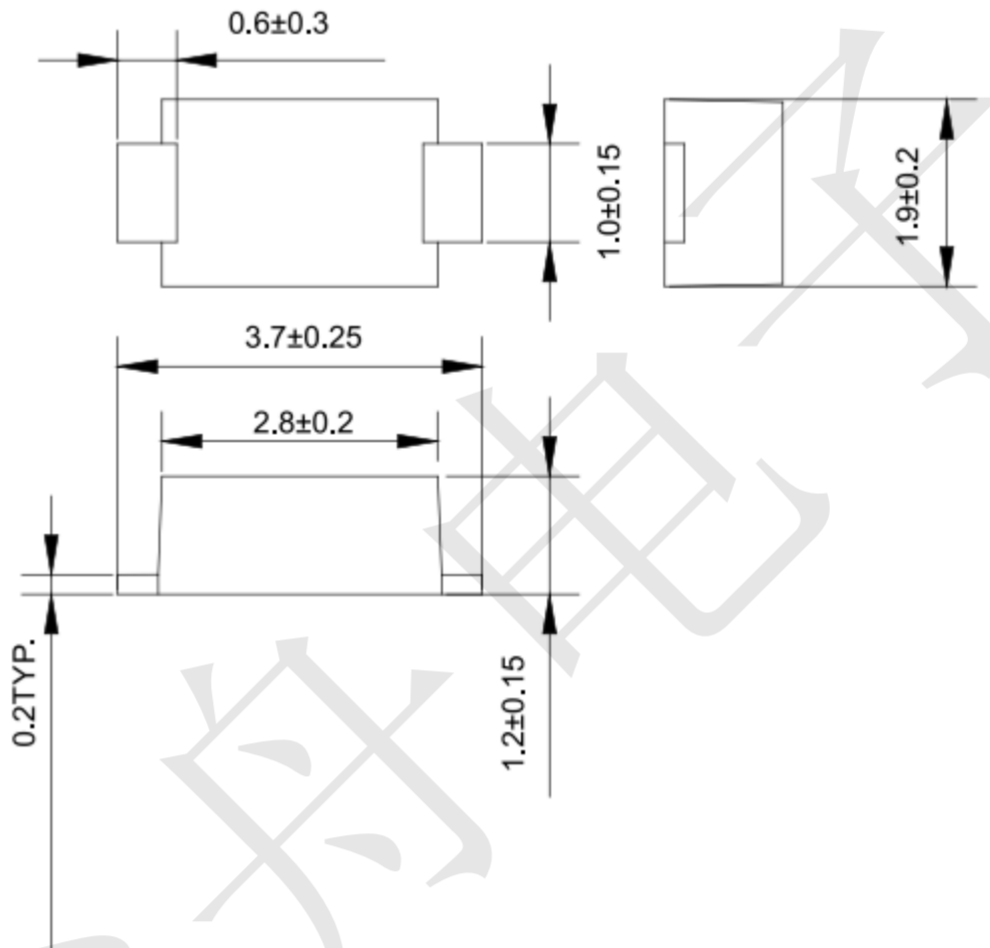


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Package Outline Dimensions (unit: mm)

SOD-123FL



Mounting Pad Layout (unit: mm)

