

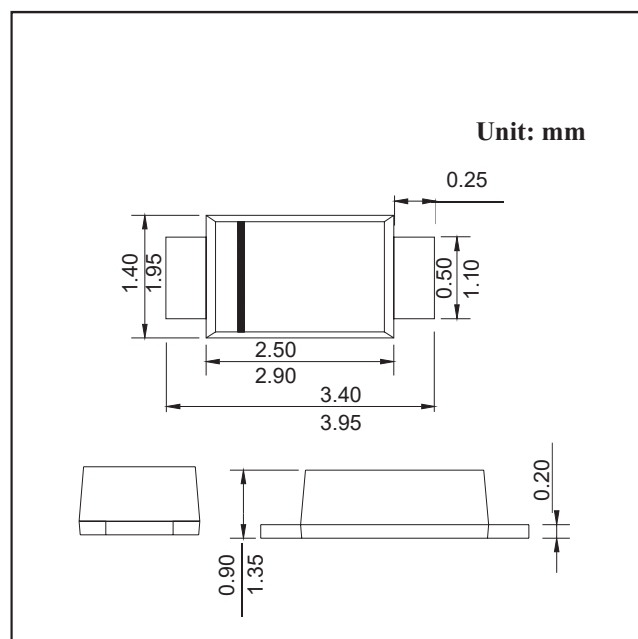
SOD123FL Schottky Barrier Rectifiers

FEATURES

- For surface mounted applications
- Ultra fast switching for high efficiency
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed 250 C/10 seconds at terminals

MECHANICAL DATA

- Case style: plastic molded
- Lead: Plated axial leads, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbols	US1AW	US1BW	US1DW	US1GW	US1JG	US1KW	US1MW	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 Ta = 65 ℃	I _{F(AV)}	1							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 1A	V _F	1.0			1.4	1.7			V
Maximum DC Reverse Current Ta = 25 ℃ Rated DC Blocking Voltage Ta =125 ℃	I _R	5 100							μA
Maximum Reverse Recovery Time 1)	t _{rr}	50				75			ns
Typical Thermal Resistance	R _{θJA}	180							℃/W
Operating and Storage Temperature Range	T _j , T _{stg}	-55 ~ +150							℃

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

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

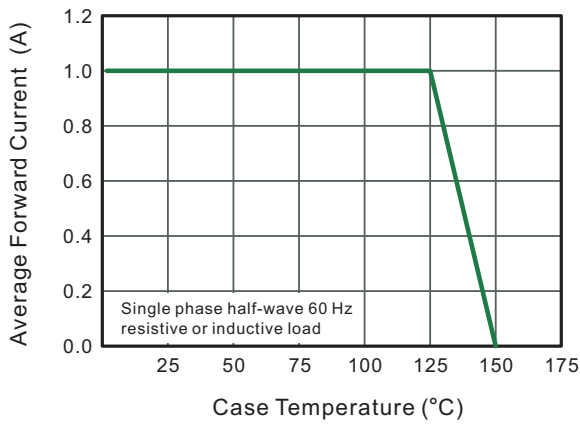


Fig.2 Typical Reverse Characteristics

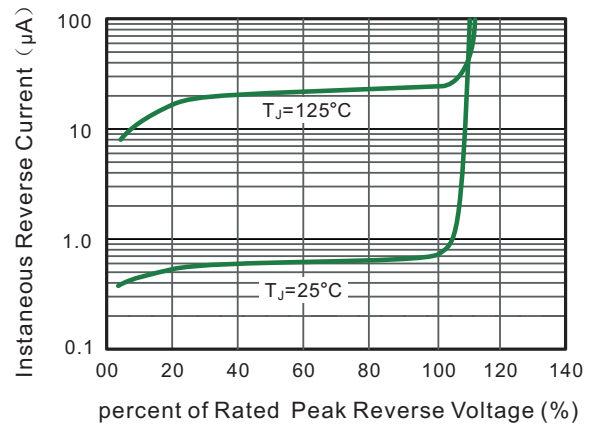


Fig.3 Typical Forward Characteristics

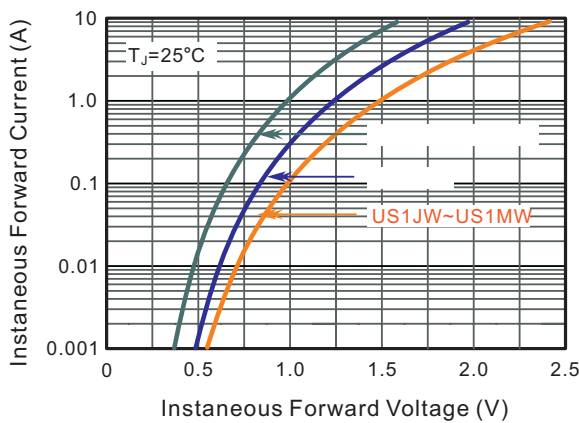


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

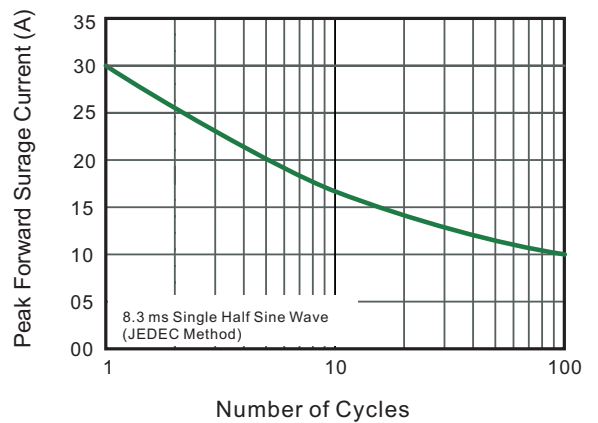


Fig.5- Typical Transient Thermal Impedance

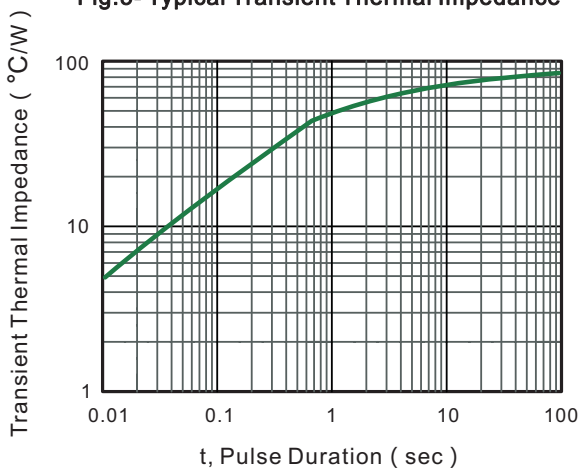


Fig.6 Typical Junction Capacitance

