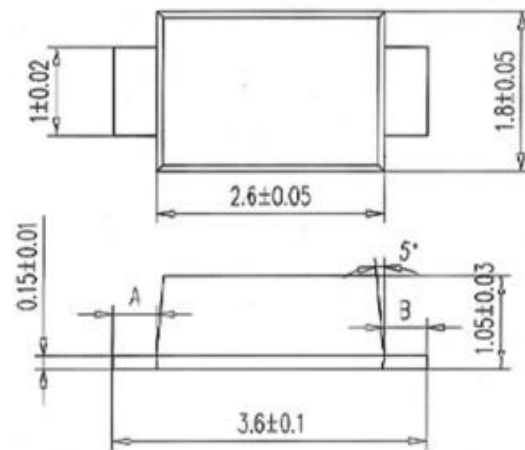


Surface Mount Fast Recovery Rectifiers Reverse Voltage - 50 to 1000 V
Forward Current - 1 A
FEATURES

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Ideal for automated placement
- Fast reverse recovery time
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: SOD-123FL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 15mg 0.00053oz


Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	F1X	F2X	F3X	F4X	F5X	F6X	F7X	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 °C	I _{F(AV)}	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1 A	V _F	1.3							V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta =125 °C	I _R	5 100							μA
Maximum Reverse Recovery Time 1)	t _{rr}	150				250	500		ns
Typical Junction Capacitance at V _R =4V, f=1MHz	C _j	15							pF
Typical Thermal Resistance 2)	R _{θJA}	120							°C/W
Operating and Storage Temperature Range	T _j , T _{stg}	-55 ~ +150							°C

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

2) P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copperpad areas.

Fig.1 Forward Current Derating Curve

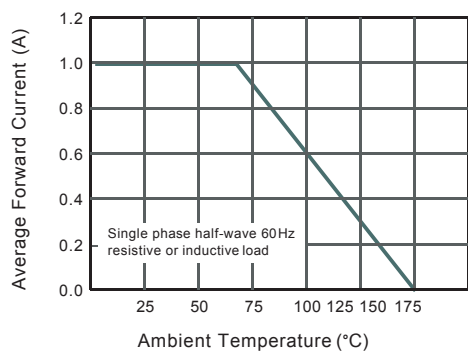


Fig.2 Typical Reverse Characteristics

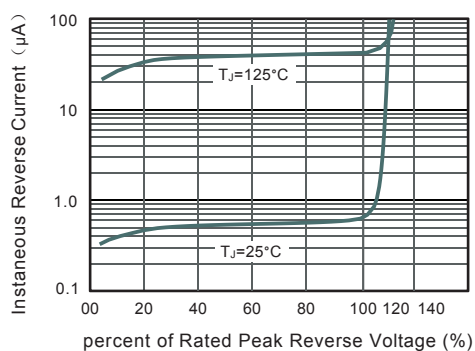


Fig.3 Typical Instantaneous Forward Characteristics

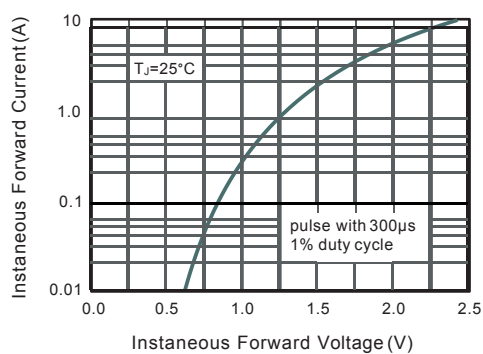


Fig.4 Typical Junction Capacitance

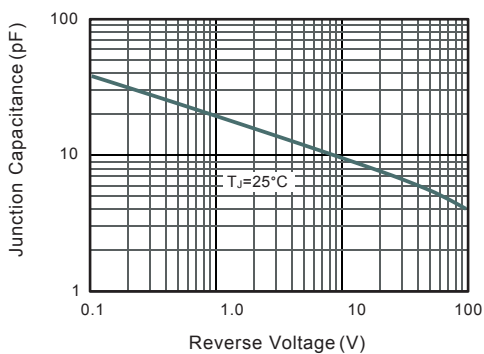


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

