



F151 THRU F157

Single Phase 1.5AMP Surface Mount Fast Recovery Rectifier

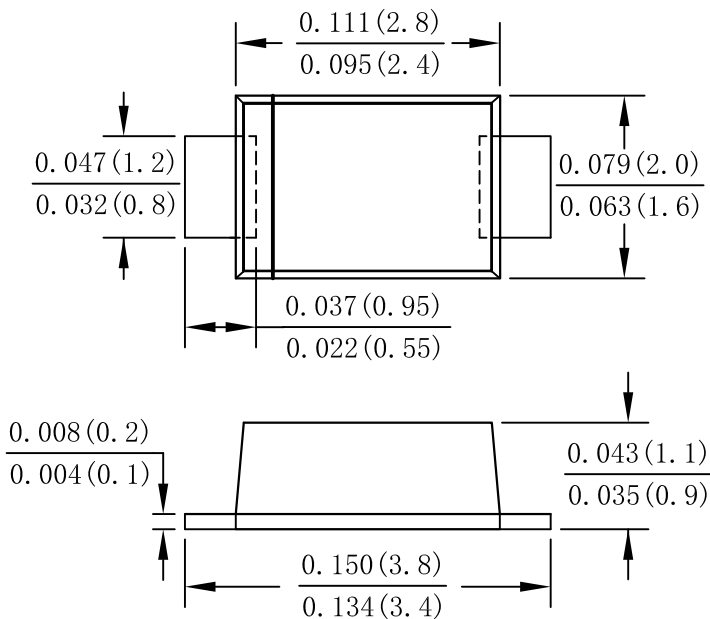
Features

- Glass passivated die construction
- Ideal for surface mounted applications
- Low reverse leakage
- Metallurgically bonded construction
- High temperature soldering guaranteed:
260°C/10 seconds, 0.375"(9.5mm) lead length,
5 lbs. (2.3kg) tension
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: SOD-123FL, molded plastic
- Terminals: plated leads solderable per
MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any

Case: SOD-123FL



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	F151	F152	F153	F154	F155	F156	F157	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
	V _{RWM}								
	V _{DC}								
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _L =90℃	I _{F(AV)}	1.5							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50							A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	10.375							A ² s
Forward Voltage per element @I _F =1.5A	V _{FM}	1.2							V
Peak Reverse Current @T _A =25℃ At Rated DC Blocking Voltage @T _A =125℃	I _R	5.0 100							uA
Typical Junction Capacitance (Note 1)	C _J	10							pF
Typical thermal resistance	R _{θJA}	75							℃/W
Maximum reverse recovery time (Note 2)	t _{rr}	150				250	160		ns
Operating and Storage Temperature Range	T _J , T _{STG}	-55to+150							℃

Note:1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C.

2. Measured with $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.



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Fig. 1 Typical Forward Current Derating Curve

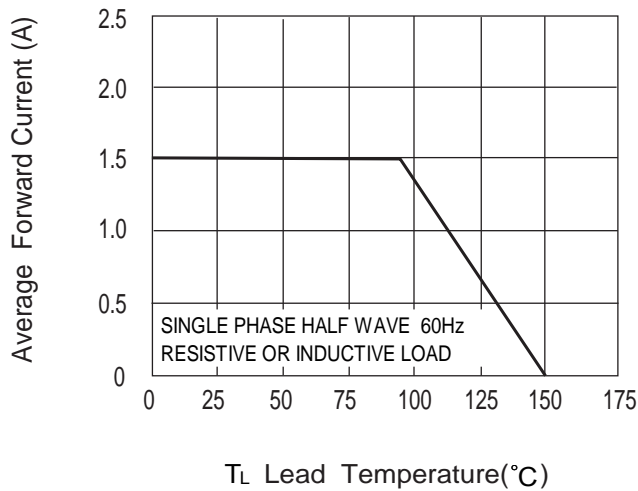


Fig. 2 Typical Instantaneous Forward Characteristics

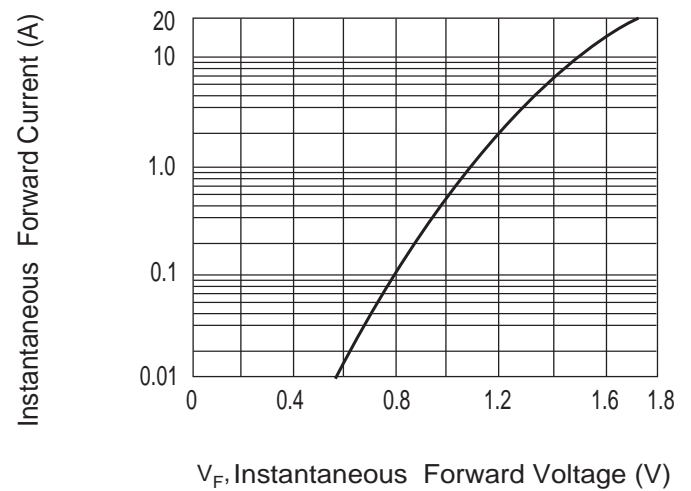


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

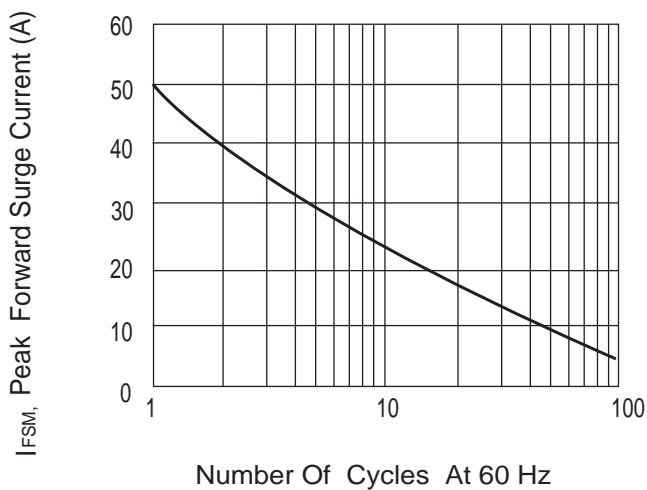


Fig.4 Typical Reverse Characteristics

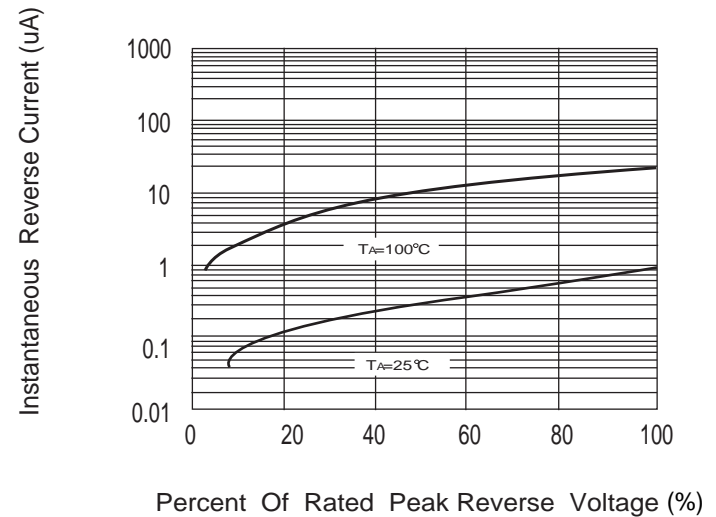
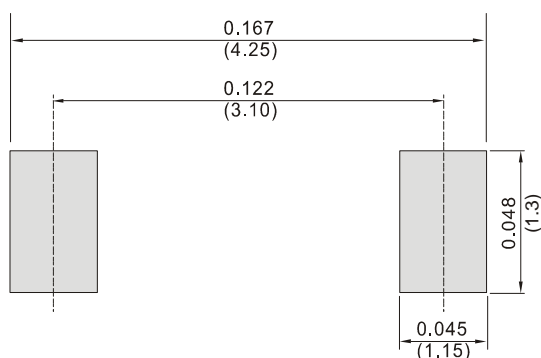


Fig.5 Typical Capacitance





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