

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 200 Volts CURRENT 2.0 Ampere

FEATURES

- * Ideal for surface mounted applications
- * Low leakage current
- * Metallurgically bonded construction
- * Mounting position: Any
- * Weight: 0.098 gram

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-0

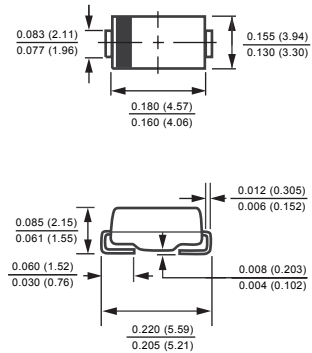
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

SMBL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	FM220L	FM230L	FM240L	FM250L	FM260L	FM280L	FM2100L	FM2150L	FM2200L	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at Ambient Temperature	I_O	2.0									Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	60									Amps
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	75									°C/W
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	17									°C/W
Typical Junction Capacitance (Note 2)	C_J	130									pF
Operating Temperature Range	T_J	150									°C
Storage Temperature Range	T_{STG}	-55 to + 150									°C

ELECTRICAL CHARACTERISTICS (@ TA=25 °C unless otherwise noted)

CHARACTERISTICS		SYMBOL	FM220L	FM230L	FM240L	FM250L	FM260L	FM280L	FM2100L	FM2150L	FM2200L	UNITS
Maximum Instantaneous Forward Voltage at 2.0A DC		V _F	.55			.70		.85				Volts
Maximum Average Reverse Current	@T _A = 25°C	I _R	0.2									mA
at Rated DC Blocking Voltage	@T _A = 100°C		2									mA

- NOTES : 1. Thermal Resistance :Mounted on PCB.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. "Fully ROHS compliant","100% Sn plating (Pb-free)".

RATING AND CHARACTERISTICS CURVES (FM220L THRU FM2200L)

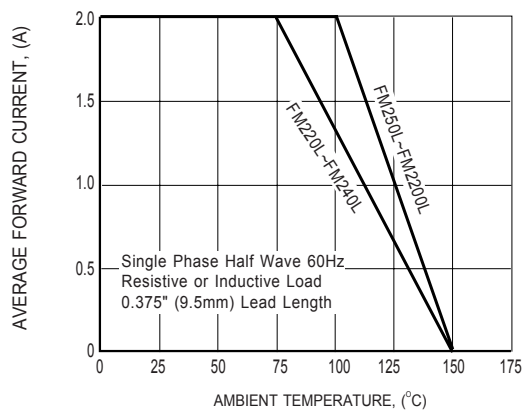


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

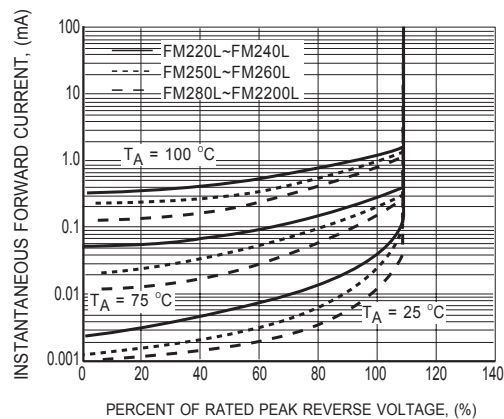


FIG.2 TYPICAL REVERSE CHARACTERISTICS

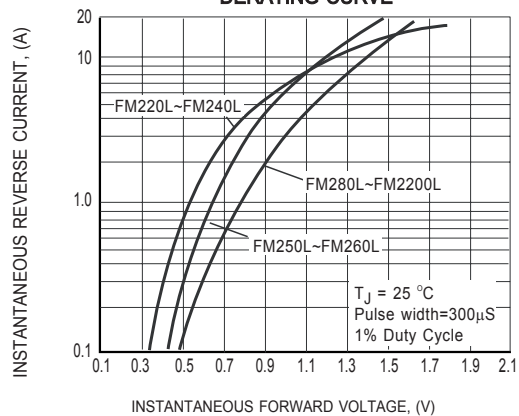


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

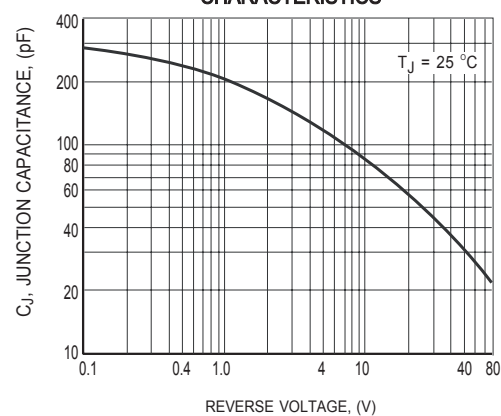


FIG.4 TYPICAL JUNCTION CAPACITANCE

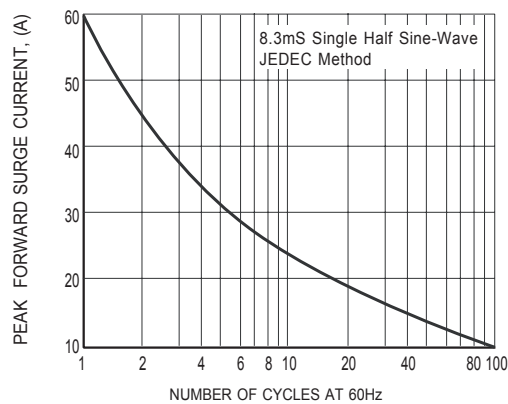
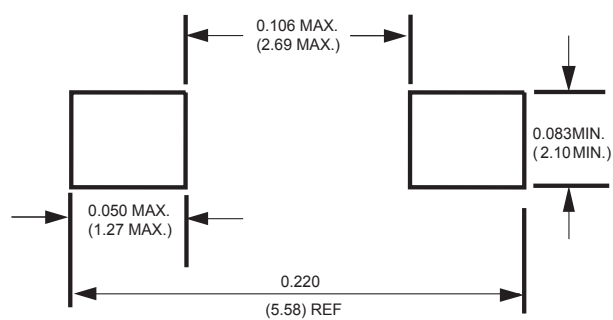


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Mounting Pad Layout



Dimensions in inches and (millimeters)

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