

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

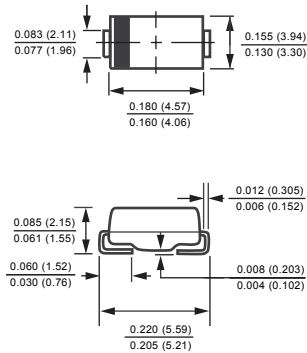
MECHANICAL DATA

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

NEW RELEASE



SMBL



Dimensions in inches and (millimeters)

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%.

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 at Rated DC Blocking Voltage	@ $T_A = 25^\circ\text{C}$							0.2				mA
	@ $T_A = 100^\circ\text{C}$							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)

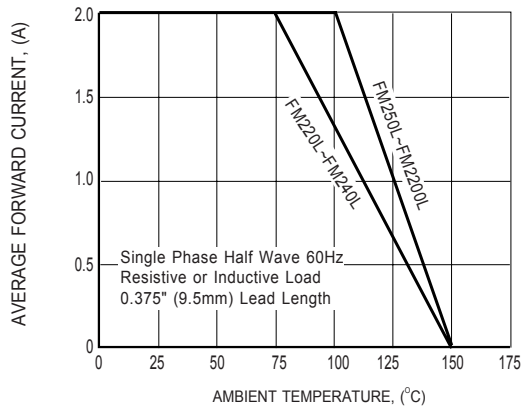


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

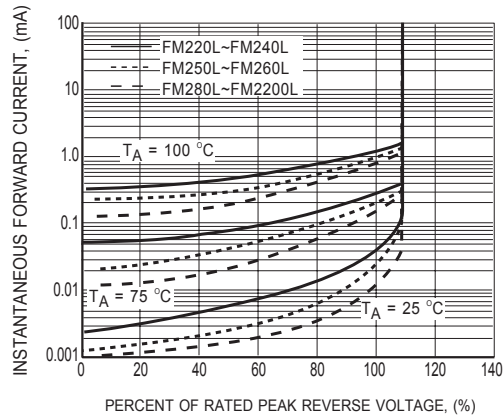


FIG.2 TYPICAL REVERSE CHARACTERISTICS

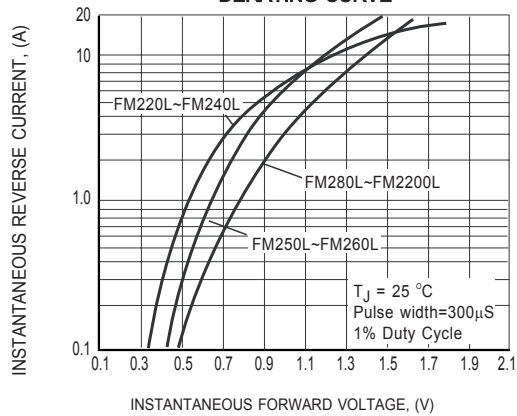


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

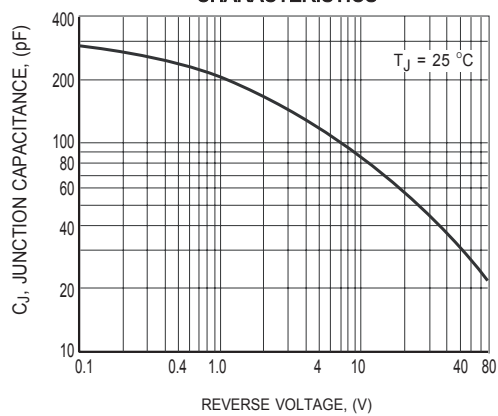


FIG.4 TYPICAL JUNCTION CAPACITANCE

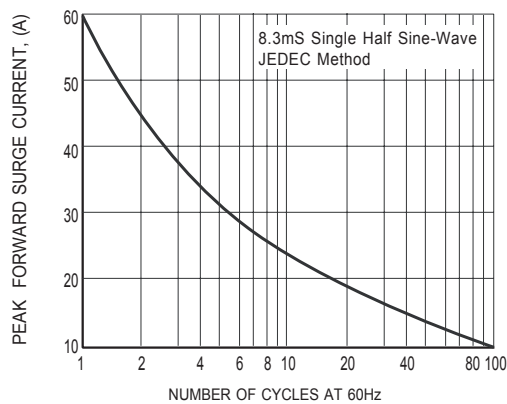
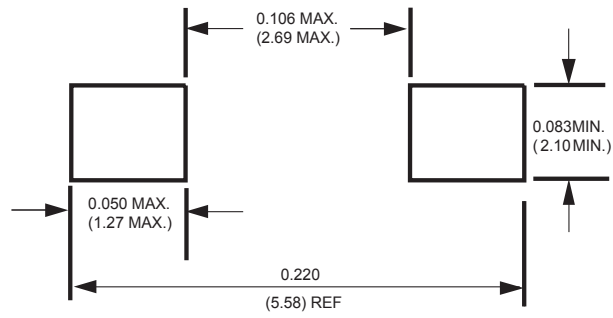


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Mounting Pad Layout



Dimensions in inches and (millimeters)

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