

**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

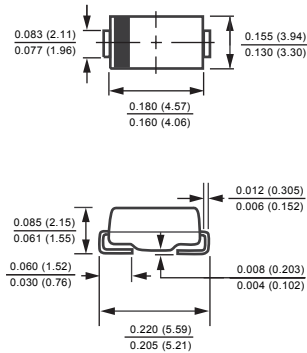
**MECHANICAL DATA**

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

NEW RELEASE



**SMBL**



**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)**

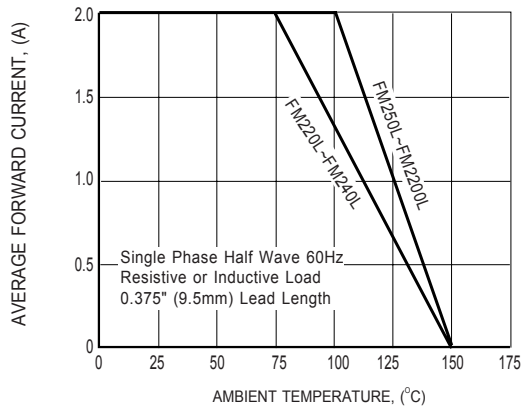
RATINGS	SYMBOL	FM220L	FM230L	FM240L	FM250L	FM260L	FM280L	FM2100L	FM2150L	FM2200L	UNITS	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	Volts	
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	105	140	Volts	
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	150	200	Volts	
Maximum Average Forward Rectified Current at Ambient Temperature	I <sub>O</sub>	2.0										Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	60										Amps
Typical Thermal Resistance (Note 1)	R <sub>θJA</sub>	75										°C/W
Typical Thermal Resistance (Note 1)	R <sub>θJL</sub>	17										°C/W
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	130										pF
Operating Temperature Range	T <sub>J</sub>	150										°C
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150										°C

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

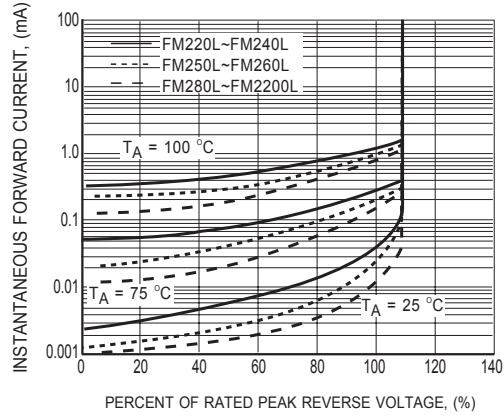
CHARACTERISTICS	SYMBOL	FM220L	FM230L	FM240L	FM250L	FM260L	FM280L	FM2100L	FM2150L	FM2200L	UNITS	
Maximum Instantaneous Forward Voltage at 2.0A DC	V <sub>F</sub>	.55			.70		.85				Volts	
Maximum Average Reverse Current at Rated DC Blocking Voltage	@T <sub>A</sub> = 25°C	0.2										mA
	@T <sub>A</sub> = 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)".

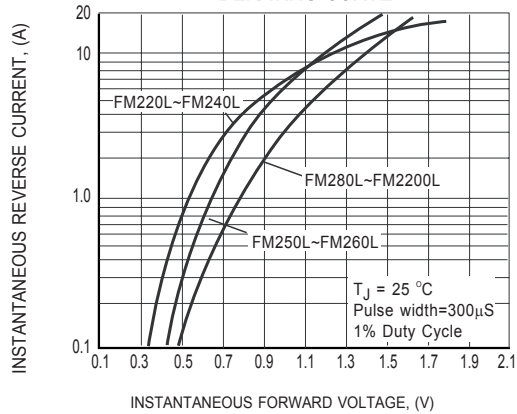
# RATING AND CHARACTERISTICS CURVES ( FM220L THRU FM2200L )



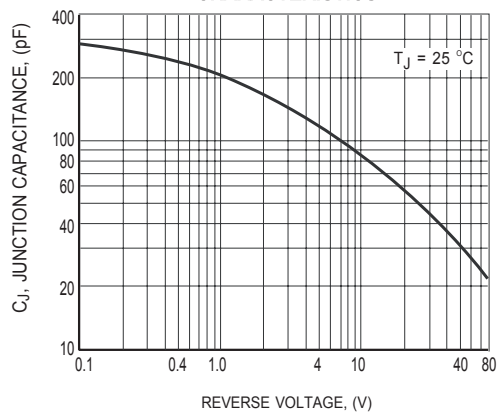
**FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE**



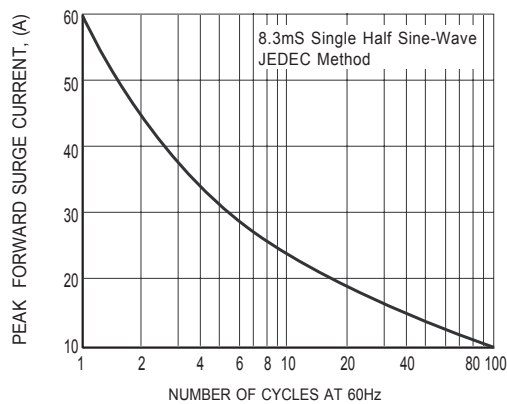
**FIG.2 TYPICAL REVERSE CHARACTERISTICS**



**FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

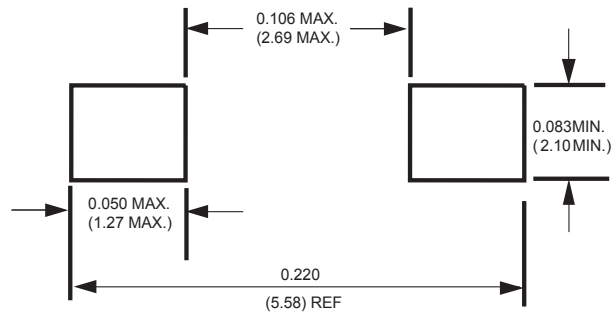


**FIG.4 TYPICAL JUNCTION CAPACITANCE**



**FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**

## Mounting Pad Layout



Dimensions in inches and (millimeters)