

**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE 20 to 200 Volts CURRENT 2.0 Ampere**

**FEATURES**

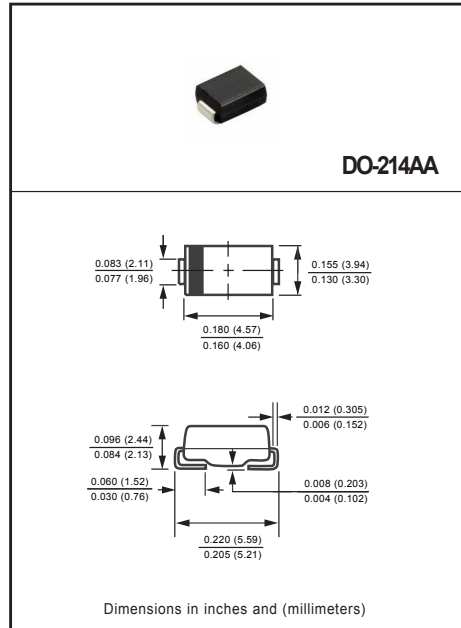
- \* Ideal for surface mounted applications
- \* Low leakage current
- \* Metallurgically bonded construction
- \* Mounting position: Any
- \* Weight: 0.098 gram

**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%.



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

RATINGS	SYMBOL	FM220	FM230	FM240	FM250	FM260	FM280	FM2100	FM2150	FM2200	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	FM220	FM230	FM240	FM250	FM260	FM280	FM2100	FM2150	FM2200	UNITS
Maximum Instantaneous Forward Voltage at 2.0A DC	V <sub>F</sub>	.55		.70			.85				Volts
Maximum Average Reverse Current	I <sub>R</sub>	0.2									mA
at Rated DC Blocking Voltage		2									

- 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)".

2006-11

## RATING AND CHARACTERISTICS CURVES ( FM220 THRU FM2200 )

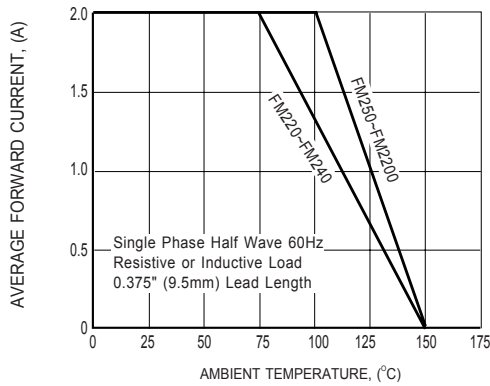


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

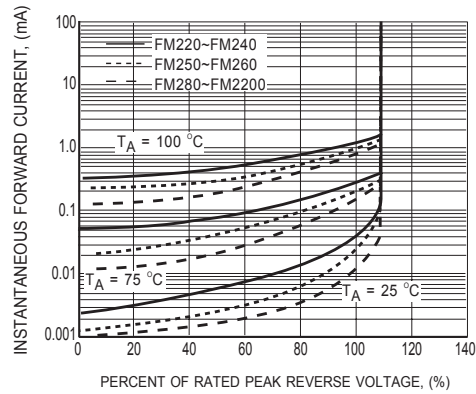


FIG.2 TYPICAL REVERSE CHARACTERISTICS

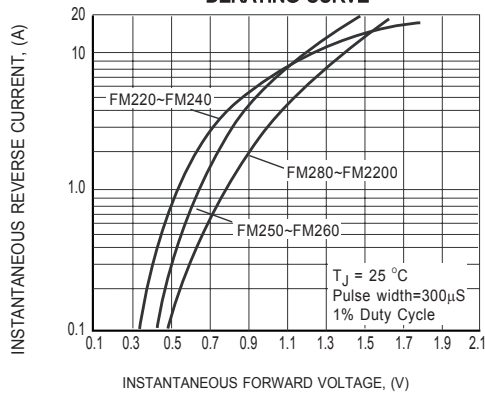


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

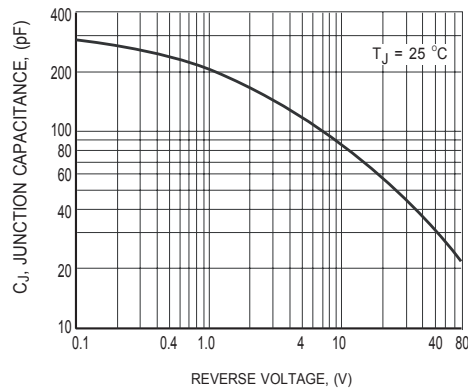


FIG.4 TYPICAL JUNCTION CAPACITANCE

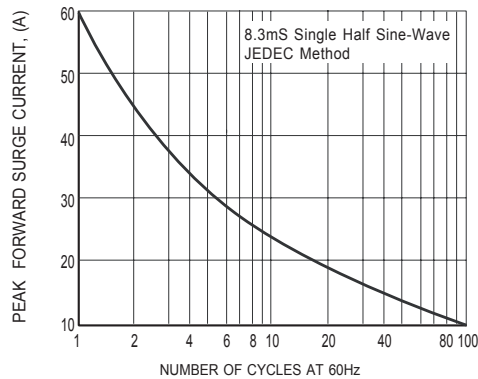
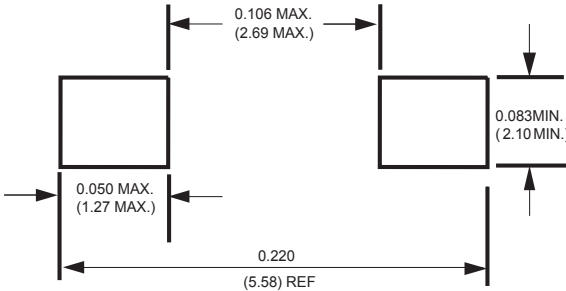


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



# Mounting Pad Layout



Dimensions in inches and (millimeters)



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