

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 200 Volts CURRENT 5.0 Ampere

FEATURES

- * Ideal for surface mounted applications
- * Low leakage current
- * Metallurgically bonded construction
- * Mounting position: Any
- * Weight: 0.24 gram

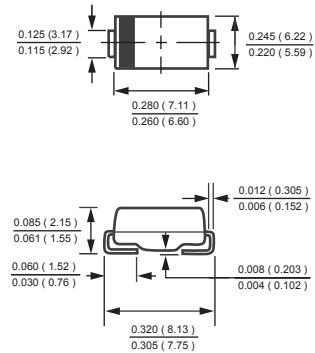
MECHANICAL DATA

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

NEW RELEASE



SMCL



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	FM520L	FM530L	FM540L	FM550L	FM560L	FM580L	FM5100L	FM5150L	FM5200L	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						5.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}						150					Amps
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$						55					°C/W
	$R_{\theta JL}$						17					
Typical Junction Capacitance (Note 2)	C_J						200					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	FM520L	FM530L	FM540L	FM550L	FM560L	FM580L	FM5100L	FM5150L	FM5200L	UNITS	
Maximum Instantaneous Forward Voltage at 5.0A DC	V_F	.55			.75			.85			Volts	
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^\circ C$						0.2					mA
	@ $T_A = 100^\circ C$						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 (FM520L THRU FM5200L)

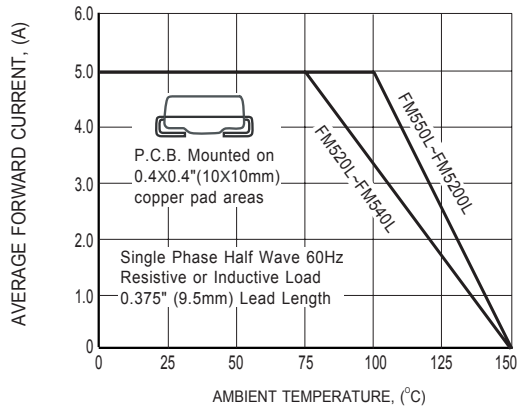


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

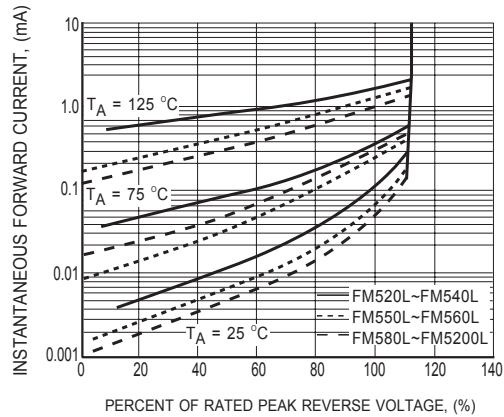


FIG.2 TYPICAL REVERSE CHARACTERISTICS

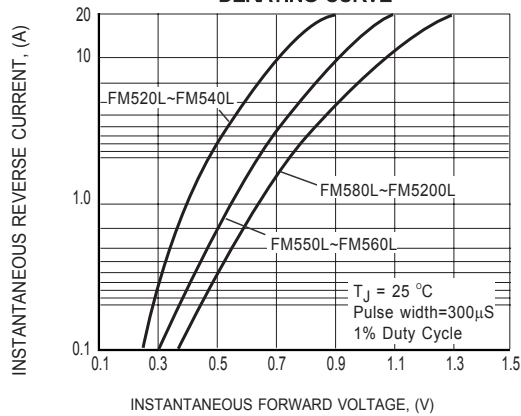


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

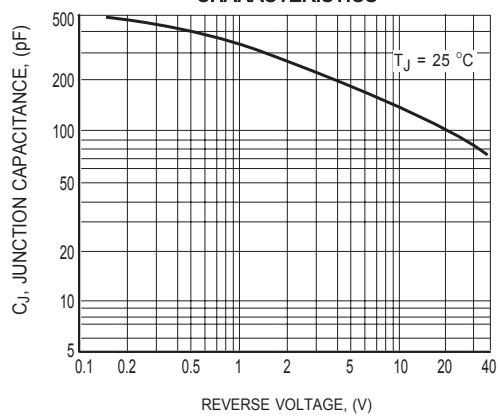


FIG.4 TYPICAL JUNCTION CAPACITANCE

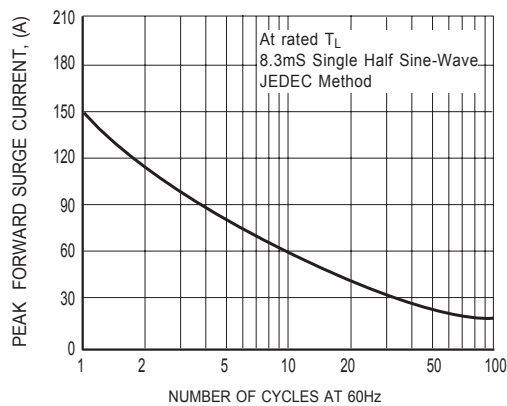
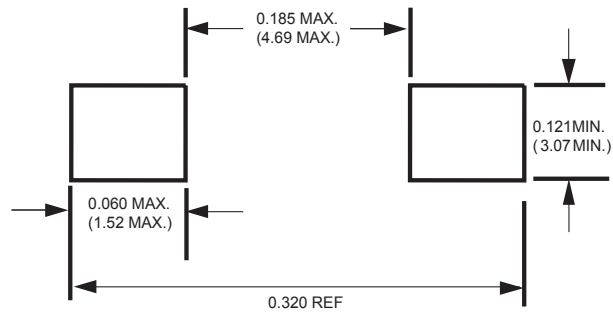


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Mounting Pad Layout



Dimensions in inches and (millimeters)

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