RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

FM520 THRU FM5200

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 200 Volts CURRENT 5.0 Ampere

FEATURES

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

MECHANICAL DATA

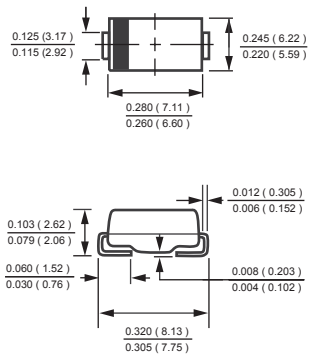
* Epoxy: Device has UL flammability classification 94V-O

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Resistive or inductive load.



DO-214AB



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	FM520	FM530	FM540	FM550	FM560	FM580	FM5100	FM5150	FM5200	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 Current Square Time	I^2T	93.3									A^2S
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	FM520	FM530	FM540	FM550	FM560	FM580	FM5100	FM5150	FM5200	UNITS
Maximum Instantaneous Forward Voltage at 5.0A DC		V_F	.55			.75		.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)".

2009-10
REV: A

RATING AND CHARACTERISTICS CURVES (FM520 THRU FM5200)

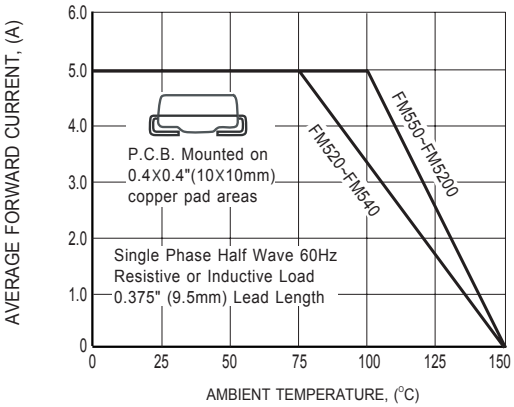


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

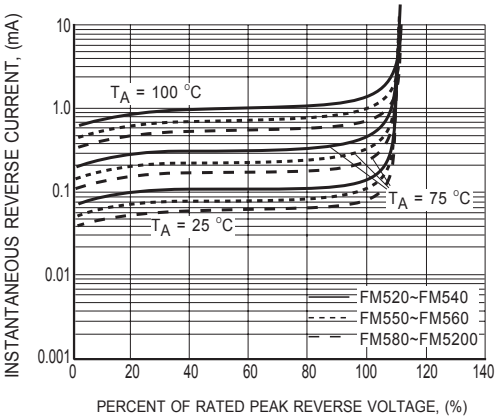


FIG.2 TYPICAL REVERSE CHARACTERISTICS

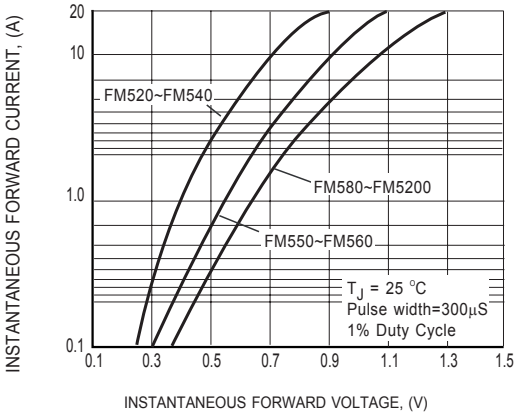


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

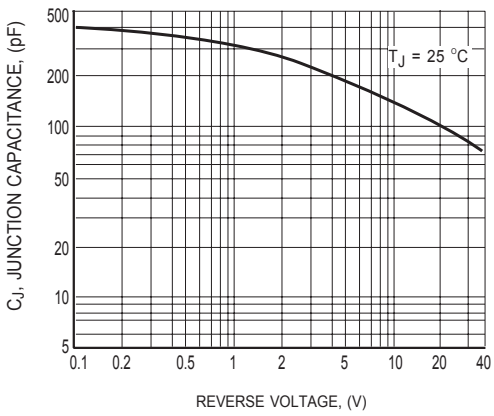


FIG.4 TYPICAL JUNCTION CAPACITANCE

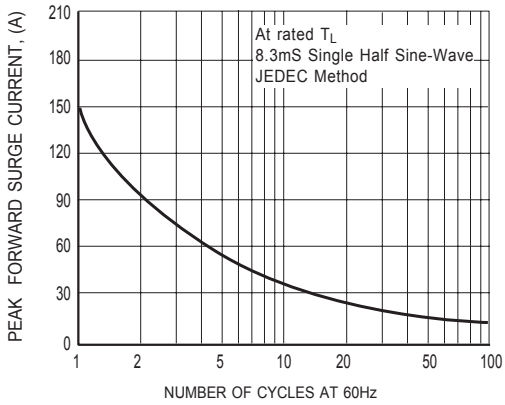
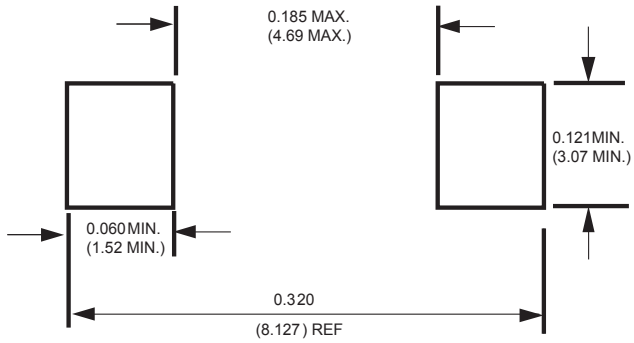


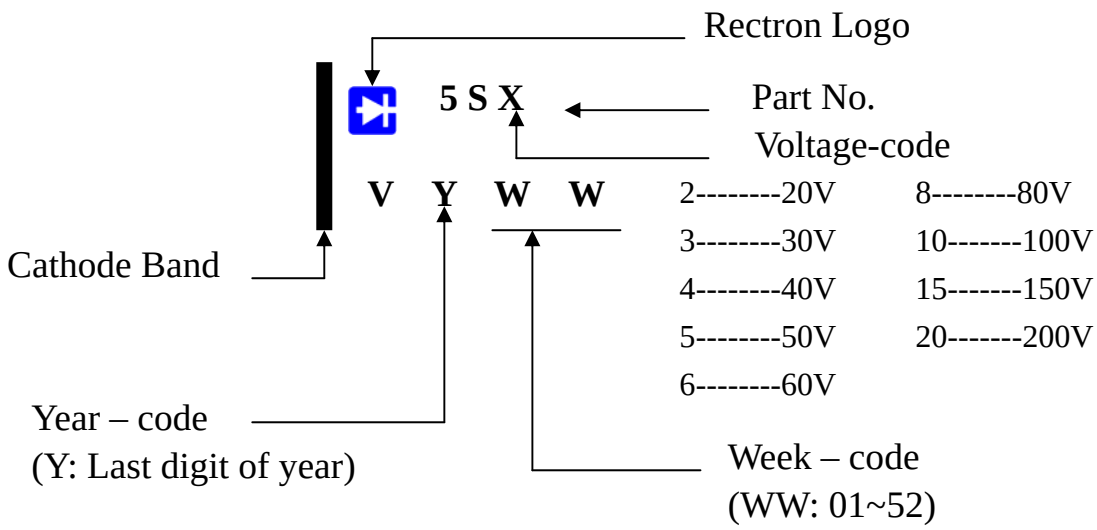
FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Mounting Pad Layout



Dimensions in inches and (millimeters)

Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	COMPONENT SPACE(mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SMC	-T	500	---	---	176	390*205*310	12,000	6.65
SMC	-W	3,000	---	---	330	355*360*350	24,000	11.50

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