

**SURFACE MOUNT SCHOTTKY
BARRIER RECTIFIER**

VOLTAGE RANGE 20 to 200 Volts CURRENT 3.0 Amperes

FEATURES

- * Ideal for surface mounted applications
- * Low leakage current
- * Metallurgically bonded construction
- * P/N suffix V means AEC-Q101 qualified, e.g:FM320BV
- * P/N suffix V means Halogen-free

MECHANICAL DATA

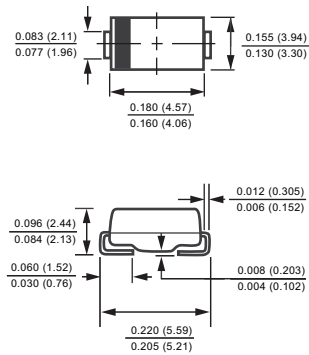
- * Epoxy: Device has UL flammability classification 94V-O
- * Mounting position: Any
- * Weight: 0.098 gram

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%.



DO-214AA



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	FM320B	FM330B	FM340B	FM350B	FM360B	FM380B	FM3100B	FM3150B	FM3200B	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	3.0									Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	100									Amps
Typical Current Squared Time	I ² T	41.5									A ² S
Typical Thermal Resistance (Note 1)	R _{θJA}	55									°C/W
	R _{θJL}	17									
Typical Junction Capacitance (Note 2)	C _J	200									pF
Operating Temperature Range	T _J	-55 to + 150									°C
Storage Temperature Range	T _{STG}	-55 to + 150									°C

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

CHARACTERISTICS	SYMBOL	FM320B	FM330B	FM340B	FM350B	FM360B	FM380B	FM3100B	FM3150B	FM3200B	UNITS
Maximum Instantaneous Forward Voltage at 3.0A DC	V _F	.55			.75			.79			Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@T _A = 25°C	60						5.0			uA
	@T _A = 150°C	4.0						0.4			mA

- NOTES : 1. Thermal Resistance : Mounted on PCB.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. " ROHS compliant".
4. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

RATING AND CHARACTERISTICS CURVES (FM320B THRU FM3200B)

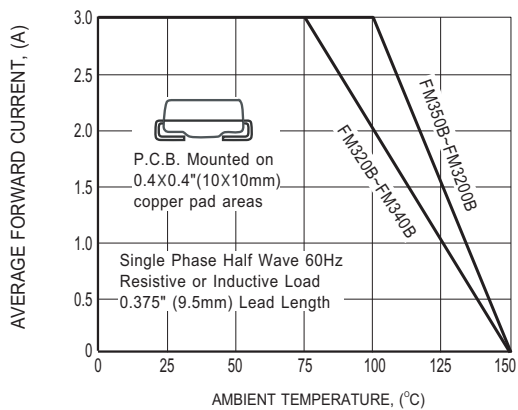


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

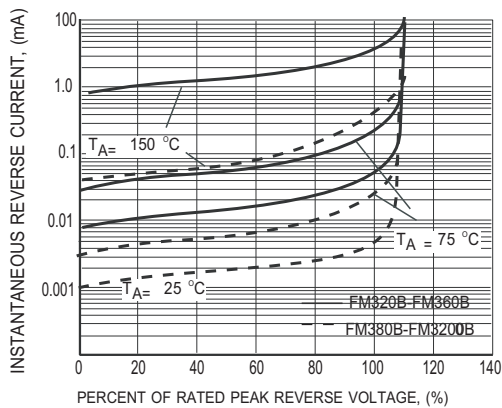


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

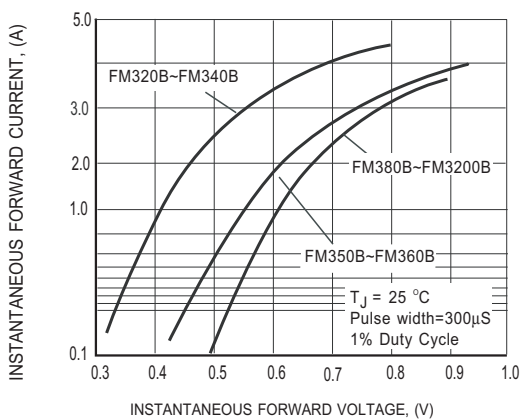


FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

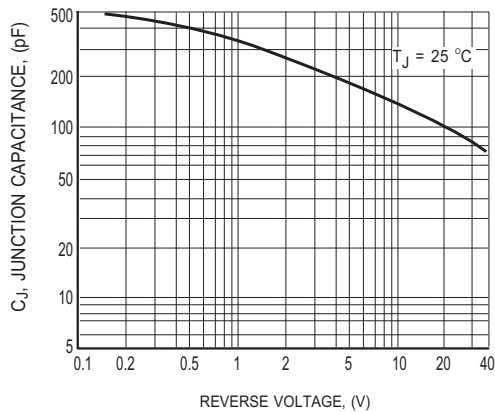


FIG.4 TYPICAL JUNCTION CAPACITANCE

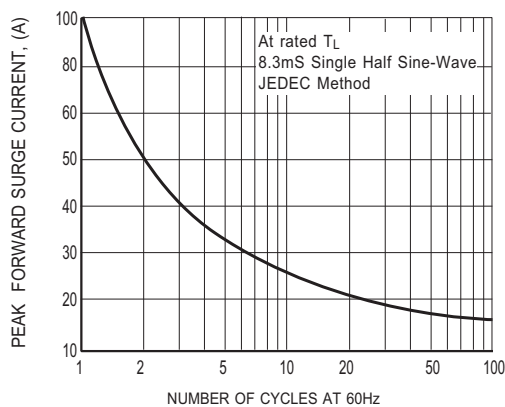
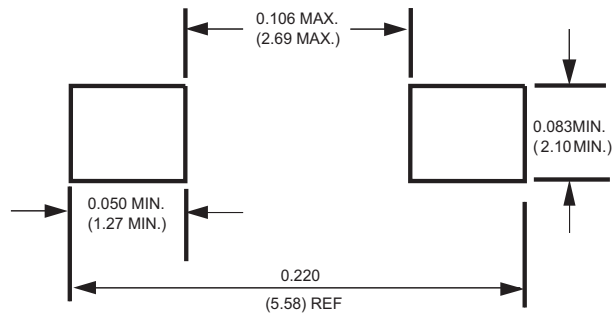


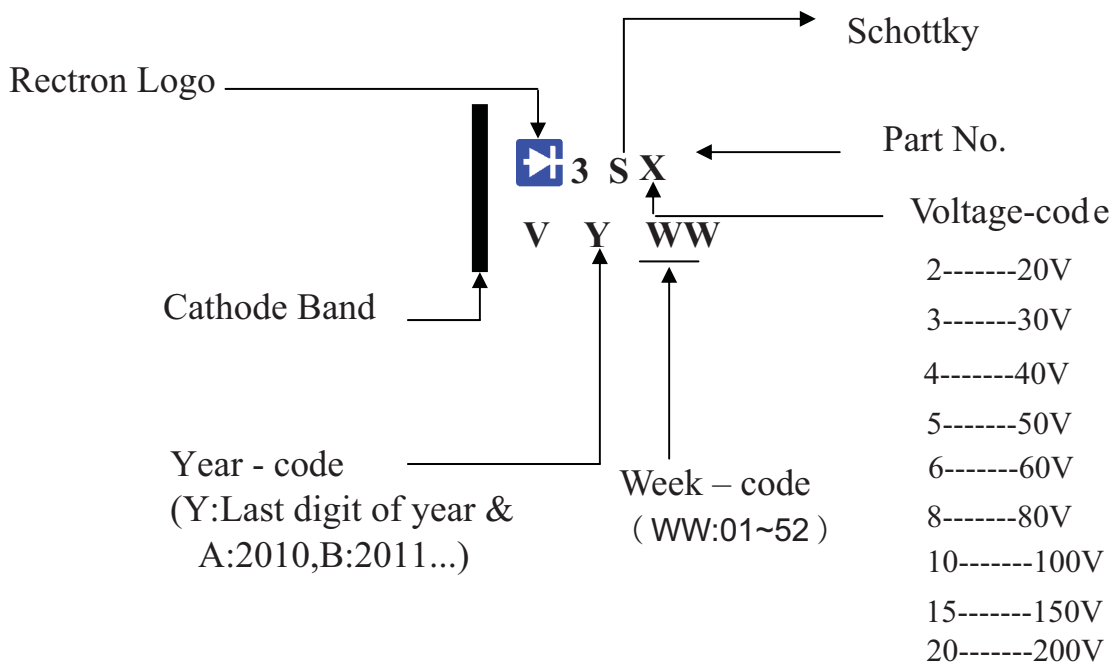
FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Mounting Pad Layout



Dimensions in inches and (millimeters)

Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SMB	-W/-T	3,000	6,000	---	---	330	360*355*360	48,000	13.90