

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 100 Volts CURRENT 1.0 Ampere

FEATURES

- * Ideal for surface mounted applications
- * Low leakage current
- * Metallurgically bonded construction
- * Mounting position: Any
- * Weight: 0.09 gram

MECHANICAL DATA

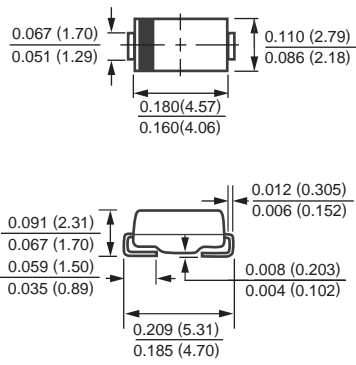
- * Epoxy: Device has UL flammability classification 94V-0

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%.



DO-214AC



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	FMB120	FMB130	FMB140	FMB150	FMB160	FMB180	FMB1100	UNITS	
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	80	100	Volts	
Maximum RMS Voltage	VRMS	14	21	28	35	42	56	70	Volts	
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	80	100	Volts	
Maximum Average Forward Rectified Current at Derating Lead Temperature	IO	1.0							Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	40							Amps	
Typical Thermal Resistance (Note 1)	RθJA	50							°C/W	
Typical Junction Capacitance (Note 2)	CJ	110							pF	
Operating Temperature Range	TJ	-65 to + 125			-65 to + 150				°C	
Storage Temperature Range	TSTG	-65 to + 150								°C

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

CHARACTERISTICS	SYMBOL	FMB120	FMB130	FMB140	FMB150	FMB160	FMB180	FMB1100	UNITS
Maximum Instantaneous Forward Voltage at 1.0A DC	VF	.55			.70		.85		Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	IR				1.0		10		mAmps
									mAmps

- NOTES : 1. Thermal Resistance (Junction to Ambient).
 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
 3. P.C.B Mounted with 0.2X0.2" (5.0X5.0mm²) copper pad area.

RATING AND CHARACTERISTIC CURVES (FM120 THRU FM1100)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

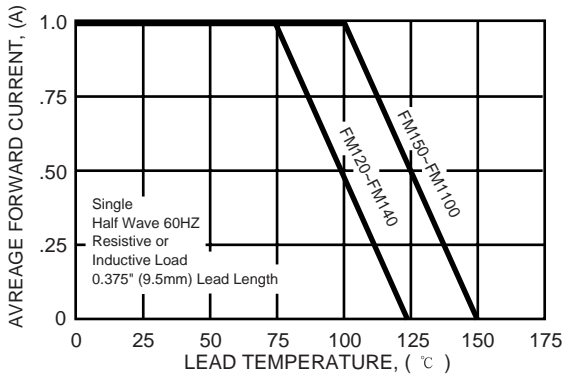


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

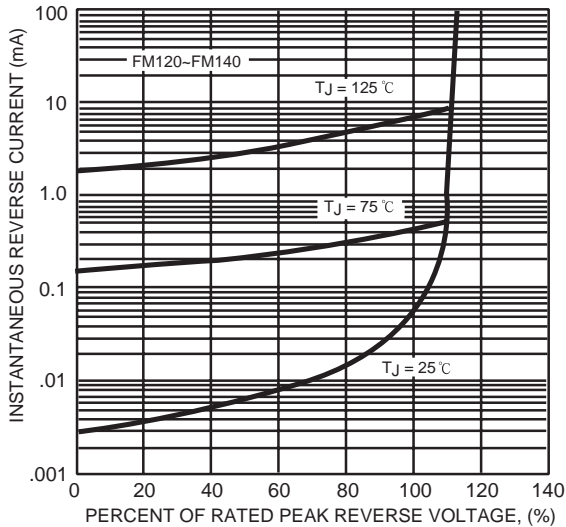


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

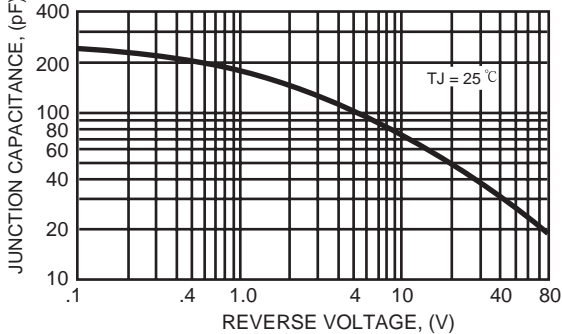


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

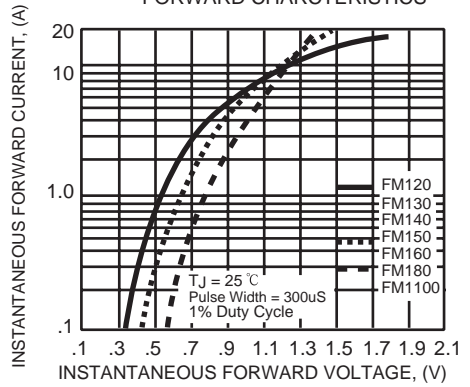


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

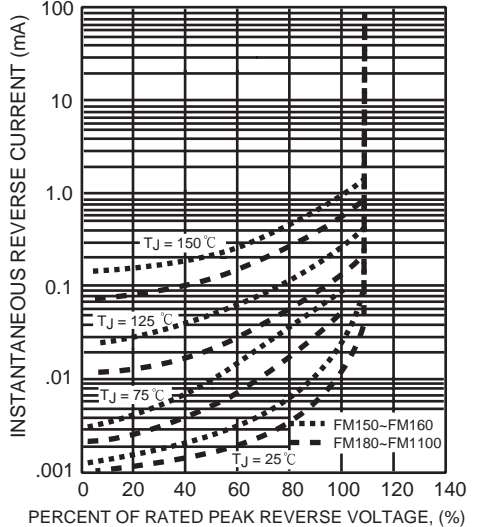


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

