

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 100 Volts CURRENT 1.0 Ampere

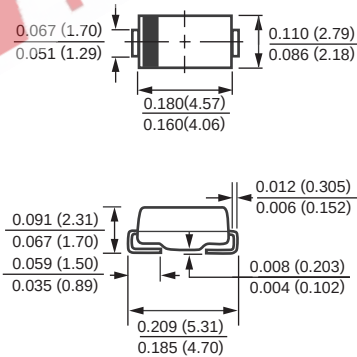
FEATURES

- * 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-O

DO-214AC



Dimensions in inches and (millimeters)

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 (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	FMB120	FMB130	FMB140	FMB150	FMB160	FMB180	FMB1100	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current at Derating Lead Temperature	I _O	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	40							Amps
Typical Thermal Resistance (Note 1)	R _{θJA}	50							°C/W
Typical Junction Capacitance (Note 2)	C _J	110							pF
Operating Temperature Range	T _J	-65 to + 125			-65 to + 150				°C
Storage Temperature Range	T _{STG}	-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		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

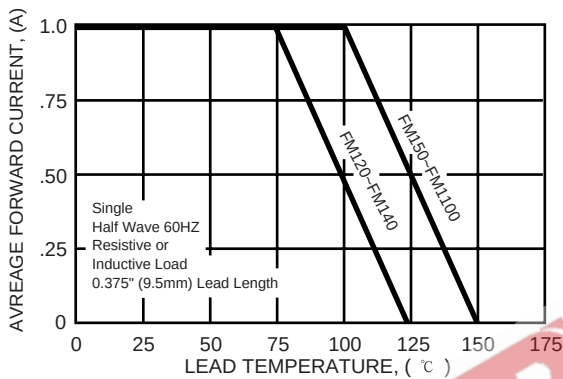


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

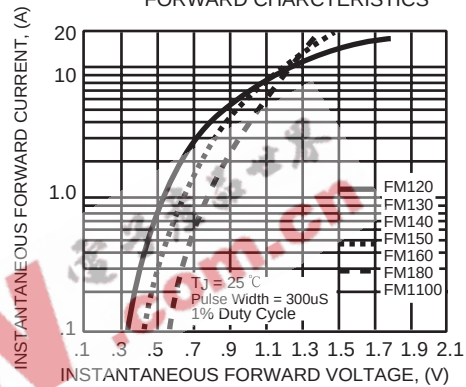


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

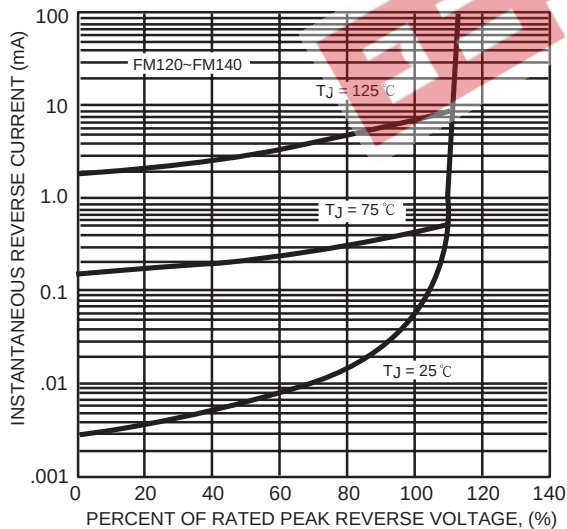


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

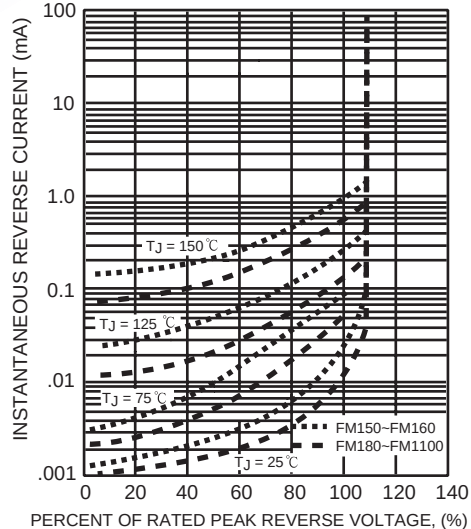


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

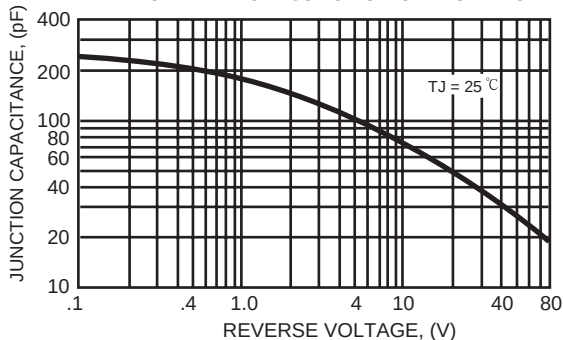


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

