



CHENMKO ENTERPRISE CO.,LTD

**SURFACE MOUNT GLASS PASSIVATED
FAST RECOVERY SILICON RECTIFIER**

VOLTAGE RANGE 50 - 1000 Volts CURRENT 2.0 Amperes

FBM21PT

THRU

FBM27PT

Lead free devices

FEATURES

- * Low leakage current
- * Ideal for surface mounted applications
- * Metallurgically bonded construction
- * Fast recovery times for high efficiency
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Glass passivated junction
- * High temperature soldering guaranteed : 260°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC SMA molded plastic

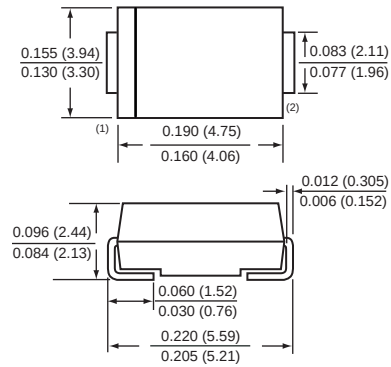
Polarity: Indicated by cathode band

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%.



SMB



SMB

MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	FBM21PT	FBM22PT	FBM23PT	FBM24PT	FBM25PT	FBM26PT	FBM27PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current $T_L = 90^\circ\text{C}$	I_o	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	60							Amps
Typical Junction Capacitance (Note 1)	C_J	40							pF
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150							$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	FBM21PT	FBM22PT	FBM23PT	FBM24PT	FBM25PT	FBM26PT	FBM27PT	UNITS
Maximum Instantaneous Forward Voltage at 2.0 A DC	V_F	1.3							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage at $T_A = 25^\circ\text{C}$	I_R	5.0							μAmps
Maximum Full Load Reverse Current Average, Full Cycle at $T_A = 55^\circ\text{C}$		100							μAmps
Maximum Reverse Recovery Time (Note 2)	t_{rr}	150				250	500		nSec

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
2. Test Conditions : $I_F = 0.5\text{ A}$, $I_R = -1.0\text{ A}$, $I_{RR} = -0.25\text{ A}$

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RATING CHARACTERISTIC CURVES (FBM21PT THRU FBM27PT)

FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

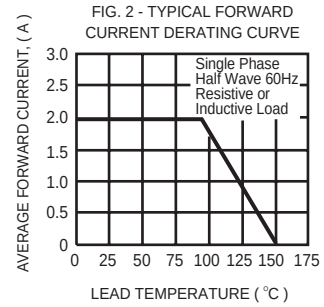
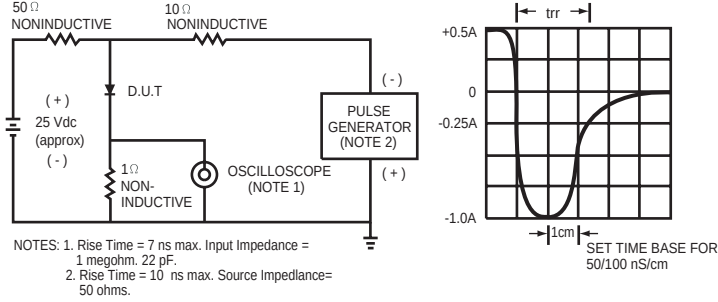


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

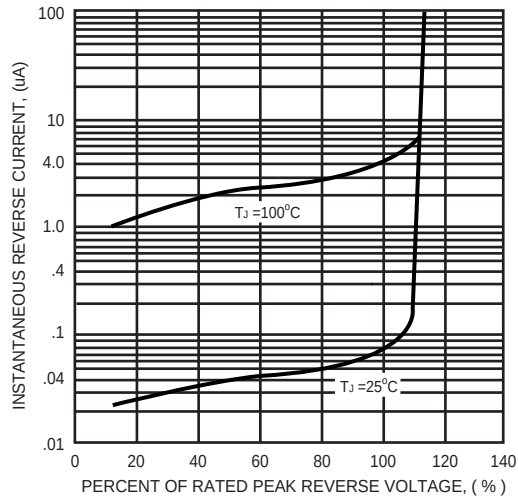


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

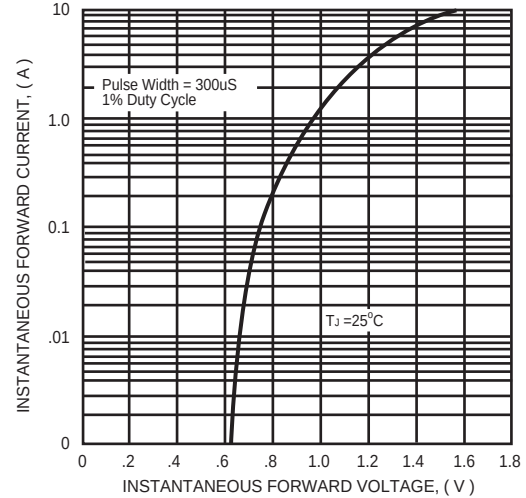


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

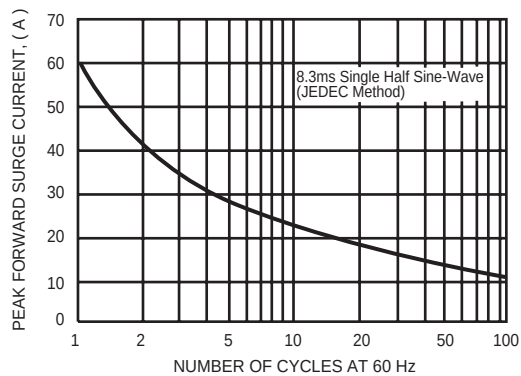


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

