

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE	20 to 200 Volts
CURRENT	5 Amperes

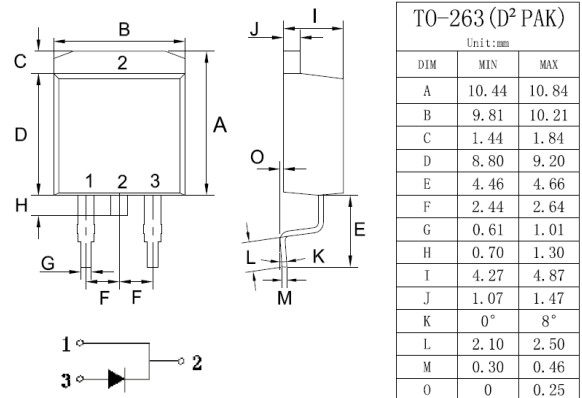
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For through hole applications
- Low profile package
- Built-in strain relief
- Low power loss, High efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Lead free in comply with EU RoHS

MECHANICAL DATA

- Case: TO-263AC molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marking

TO-263 (D² PAK)



MAXIMUM RATINGS

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%

PARAMETER	SYMBOL	MBR 520G	MBR 540G	MBR 545G	MBR 550G	MBR 560G	MBR 580G	MBR 5100G	MBR 5150G	MBR 5200G	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	V _{RMS}	14	28	31.5	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	20	40	45	50	60	80	100	150	200	V
Maximum Average Forward (See Figure 1)	I _{F(AV)}	5									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	150									A
Maximum Forward Voltage at 5.0A per leg	V _F	0.60			0.70		0.85		0.90	0.92	V
Maximum DC Reverse Current at T _J =25°C Rated DC Blocking Voltag T _J =100°C	I _R	0.2 2									mA
Typical Thermal Resistance Note 1	R _{θJC}	60									°C / W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +125			-55 to +150						°C

Note 1: Mounted on FR-4 PCB Copper, minimum recommended pad layout

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

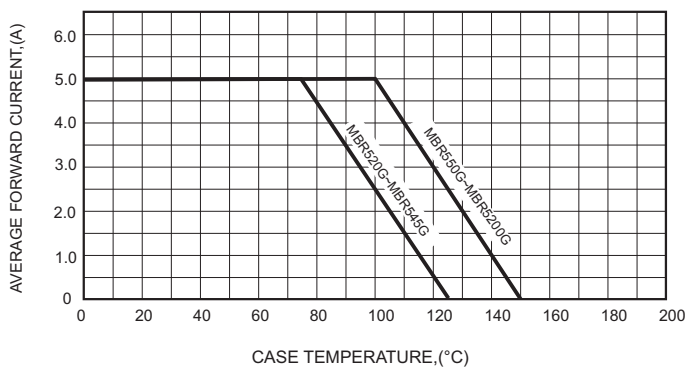


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

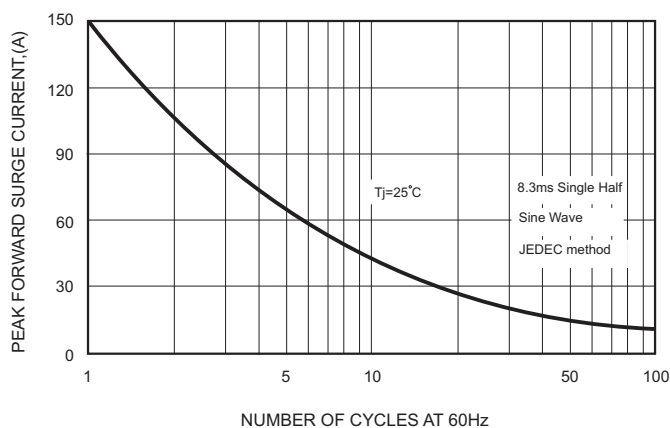


FIG.2-TYPICAL FORWARD CHARACTERISTICS

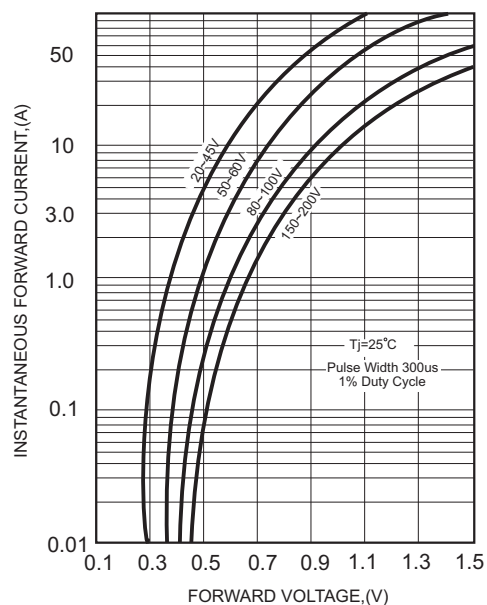
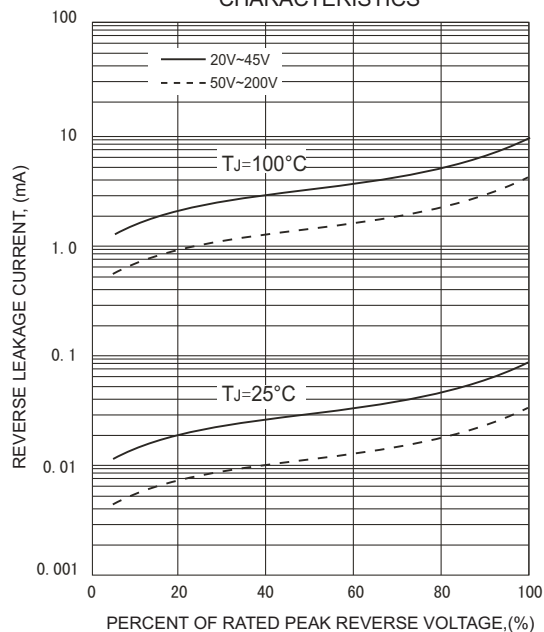


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



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