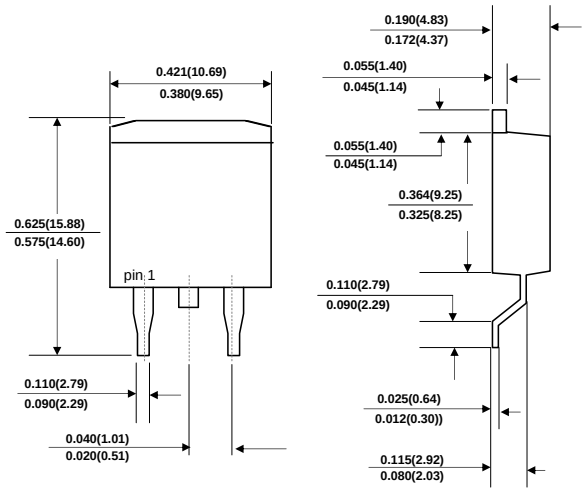
MBR1620B THRU MBR16200B

D²PAK SURFACE SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 and 200 Volts Forward Current - 16.0 Ampere

TO-263/D²PAK



Dimensions in inches and (millimeters)

FEATURES

- Flame Retardant Epoxy Molding Compound.
- Metal silicon junction, majority carrier conduction.
- Low power loss, High efficiency, High current capability.
- Guardring for overvoltage protection.
- Electrically Isolated. No Isolation Hardware Required.
- In compliance with EU Rohs 2002/95/EC directives.
- For use low voltage, high frequency inverters froo wheeling, and polarlity protection application.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0.

MECHANICAL DATA

Case:TO-263/D²PAK, Molded plastic package.
Terminals: Solderable per MIL-STD-750，Method 2026
Standard Packaging : Tube.
Polarity: As marked.
Mounting Position: Any.
Weight: 0.0514 ounces, 1.46 grams.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specif ied.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

PARAMETER	SYMBOLS	MBR 1620B	MBR 1635B	MBR 1645B	MBR 1660B	MBR 16100B	MBR 16150B	MBR 16200B	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	35	45	60	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	14	24.5	31.5	42	70	105	140	Volts
Minimum DC Breakdown Voltage	V_{DC}	20	35	45	60	100	150	200	Volts
Average Rectified current	$I_{F(AV)}$	16							Amp
Non-repetitive Peak Forward Surge Current at 1=8.3ms half sine-wave superimposed on rated load (JEDEC mathod)	I_{FSM}	150							Amps
Maximum Forward Voltage at I_F=16A	V_F	0.55			0.75	0.80	0.92		Volts
Maximum DC Reverse Current at T_J= 25℃ Rated DC Blocking Voltage T_J=100℃	I_R	0.05 20							mA
Typical Thermal Resistance	$R_{\theta JC}$	2.5							℃/W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-50 ~ +150			-65 ～ +175				℃

Note: Both bonding and chip structure are available.

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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

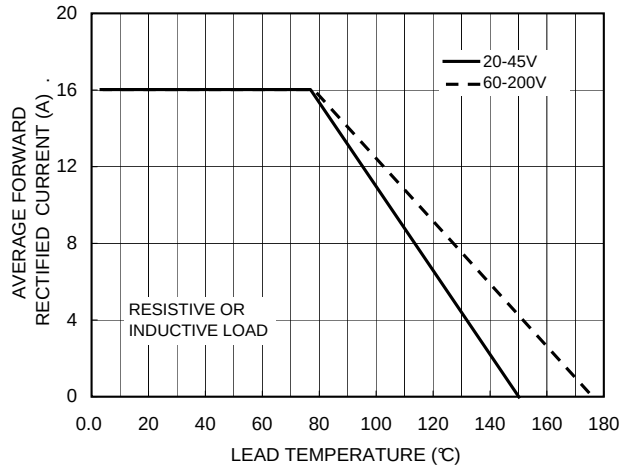

FIG. 2-TYPICAL FORWARD SURGE CHARACTERISTICSE

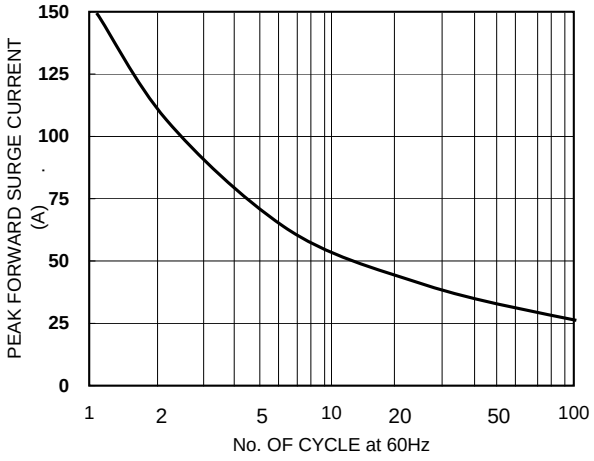

FIG. 3-TYPICAL REVERSE CHARACTERISTICS

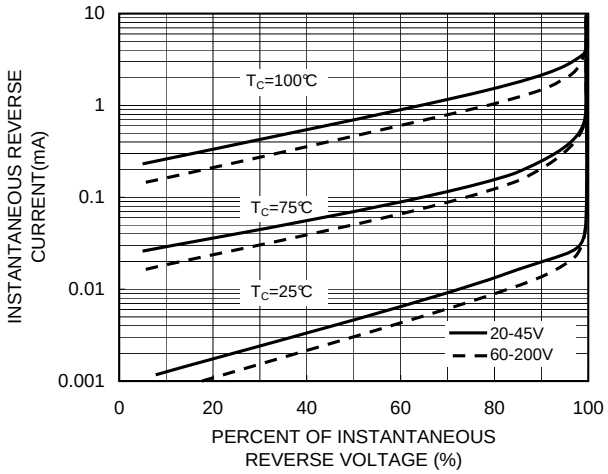

FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS