

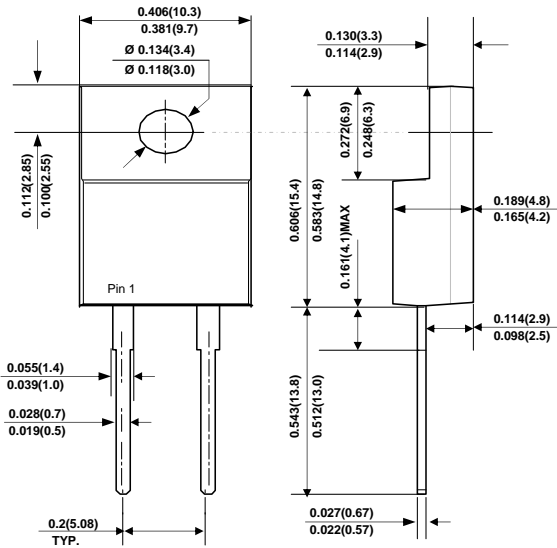


MBR1620F THRU MBR16200F

16 AMPERS ISOLATION SCHOTTKY BARRIER RECTIFIER

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

ITO-220AC



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 for wheeling, and polarity protection application.
- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0.

MECHANICAL DATA

Case: ITO-220AC, Full molded plastic package.

Terminals: Solderable per MIL-STD-750 Method 2026

Standard Packaging : Tube.

Polarity: As marked.

Mounting Position: Any.

Weight: 0.055ounces, 1.5615 grams.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOLS	MBR 1620F	MBR 1635F	MBR 1645F	MBR 1660F	MBR 16100F	MBR 16150F	MBR 16200F	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 method)	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 Rated DC Blocking Voltage $T_J=25^\circ C$ $T_J=100^\circ C$	I_R	0.05				20			mA
Typical Thermal Resistance	$R_{\theta JC}$	4.0							°C/W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-50 ~ +150				-65 ~ +175			°C

Note: Both bonding and chip structure are available.



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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

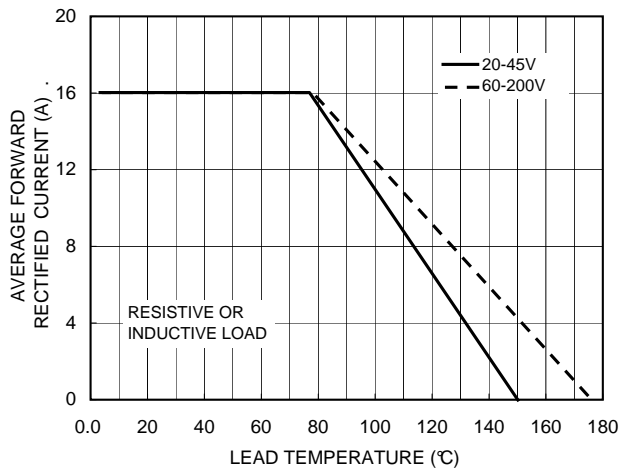


FIG. 2-TYPICAL FORWARD SURGE CHARACTERISTICS

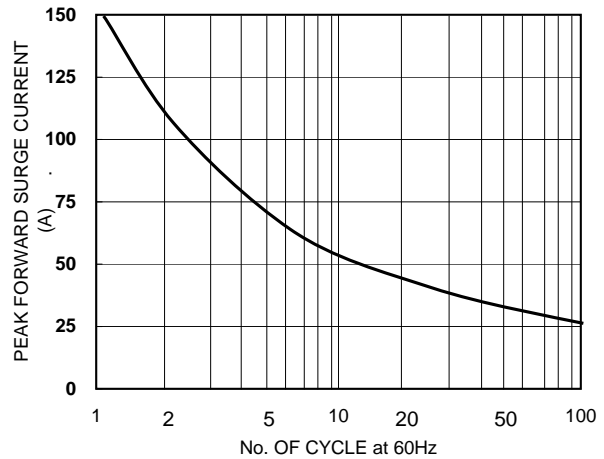


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

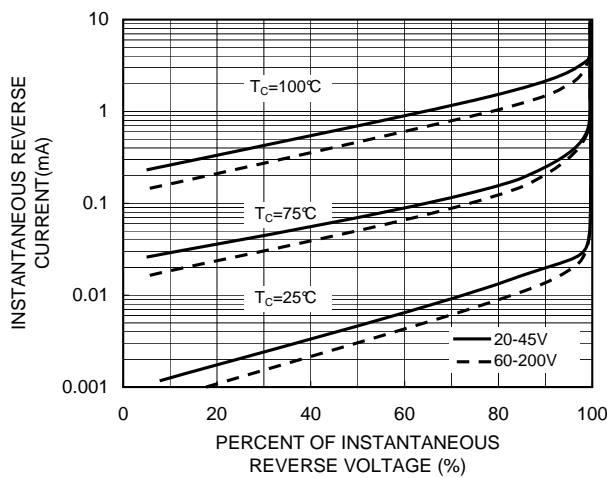


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

