

MBRB3030CT~MBRB3060CT

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 60 Volt **CURRENT** 30 Amper

TO-263(D²PACK)

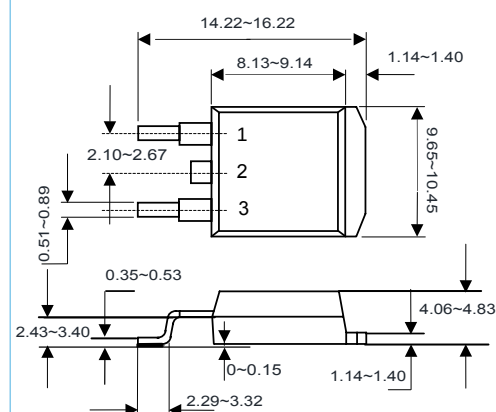
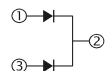
Unit:mm

FEATURES

- Meatl of Silicon Rectifier, Majority Conducton
- Guard ring for transient protection
- High Current Capability, High Efficiency
- Low Forward Voltage Drop and Low Power Loss
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

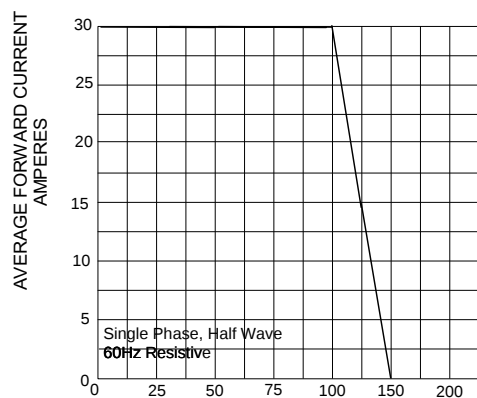
Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load.

PARAMETER	SYMBOL	MBRB3030CT	MBRB3040CT	MBRB3045CT	MBRB3060CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30	40	45	60	V
Maximum RMS Voltage	V_{RMS}	21	28	31.5	42	V
Maximum DC Blocking Voltage	V_{DC}	30	40	45	60	V
Maximum Average Forward Current (See Figure 1)	$I_{F(AV)}$	30				A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	250				A
Maximum Forward Voltage at 15 A per leg	V_F	0.55			0.72	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	I_R	1.0 75				mA
Typical Junction Capacitance@Measured at 1.0MHz, $V_R=4.0V$	C_J	420				pF
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150				°C

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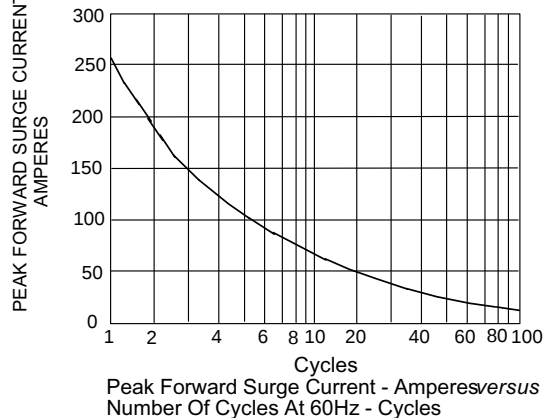
RATING AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE



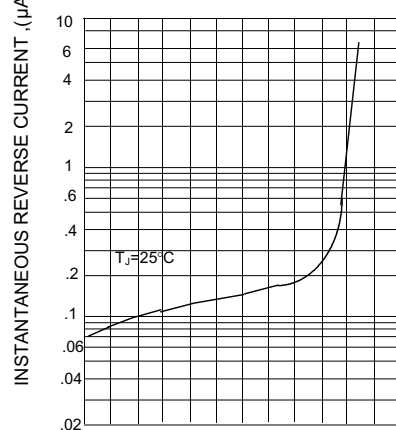
Average Forward Rectified Current -
Ambient Temperature -°C

FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT



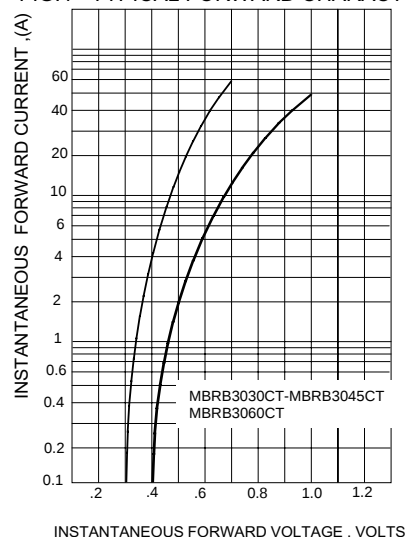
Peak Forward Surge Current - Amperes
Number Of Cycles At 60Hz - Cycles

FIG.3 - TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)

FIG.4 - TYPICAL FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

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ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
MBRB3030CT~MBRB3060CT	TO-263	13 Inch	800