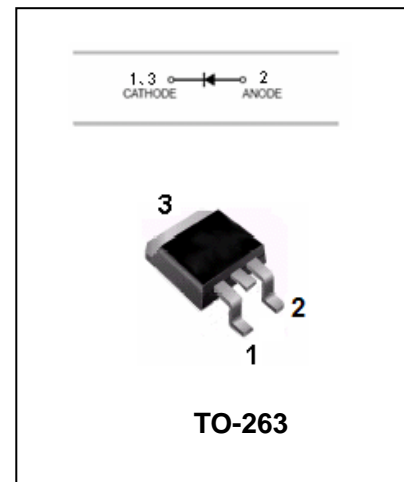


SchottkyBarrierRectifiers

MBRB2020-MBRB20100

FEATURES

- High surge capacity.
- For use in low voltage,high frequency
Inverters,free wheeling,and polarity protection applications.
- Metal silicon junction,majority carrier conduction.
- High current capacity,lowforward voltage drop.
- Guard ring for over voltage protection.



Ordering Information

Part Number	Package	Shipping	Marking Code
MBRB2020□	TO-263	50/Tube or 800Tape Reel	MBRB2020
MBRB2030□	TO-263	50/Tube or 800Tape Reel	MBRB2030
MBRB2035□	TO-263	50/Tube or 800Tape Reel	MBRB2035
MBRB2040□	TO-263	50/Tube or 800Tape Reel	MBRB2040
MBRB2045□	TO-263	50/Tube or 800Tape Reel	MBRB2045
MBRB2050□	TO-263	50/Tube or 800Tape Reel	MBRB2050
MBRB2060□	TO-263	50/Tube or 800Tape Reel	MBRB2060
MBRB2080□	TO-263	50/Tube or 800Tape Reel	MBRB2080
MBRB20100□	TO-263	50/Tube or 800Tape Reel	MBRB20100

□: none is for Lead Free package;

“G” is for Halogen Free package.

SchottkyBarrierRectifiers

MBRB2020-MBRB20100

MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBR B2020	MBR B2030	MBR B2035	MBR B2040	MBR B2045	MBR B2050	MBR B2060	MBR B2080	MBRB 20100	Unit
V_{RRM}	Recurrent Peak Reverse Voltage	20	30	35	40	45	50	60	80	100	V
V_{RMS}	RMS Voltage	14	21	25	28	32	35	42	56	70	V
V_{DC}	DC Blocking Voltage	20	30	35	40	45	50	60	80	100	V
$I_{F(AV)}$	Average Forward Total Device Rectified Current @ $T_A=100^\circ\text{C}$	20									A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on rated load	150									A
$R_{\theta JC}$	Thermal Resistance (Note1)	2									$^\circ\text{C}/\text{W}$
$T_J T_{stg}$	Operating Junction and Storage Temperature Range	-55 to +150									$^\circ\text{C}$

Note:1. Thermal resistance from junction to case.

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

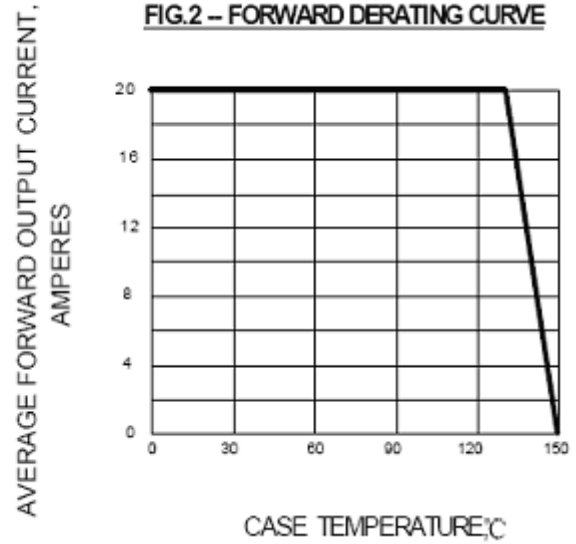
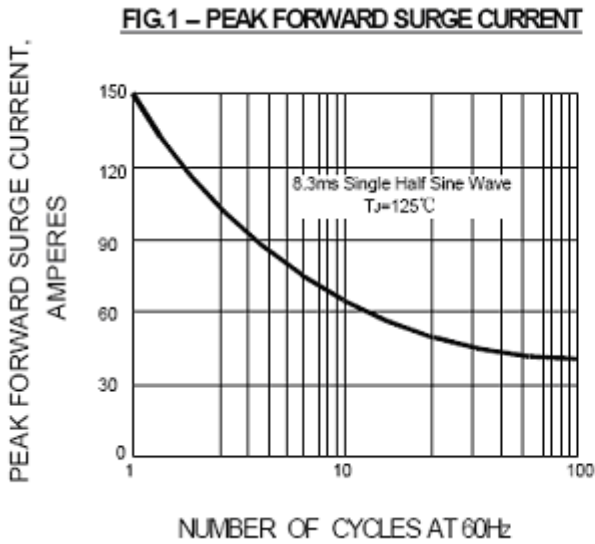
Parameter	Symbol	Test conditions	MBRB2020- MBRB2045	MBRB2050- MBRB2060	MBRB2080- MBRB20100	UNIT
			MAX			
Reverse Current	I_R	$V_R=V_{RRM}, T_A=25^\circ\text{C}$ $V_R=V_{RRM}, T_A=125^\circ\text{C}$	0.1 15	0.1 25	0.1 50	mA
Forward Voltage	$V_F^{(Note1)}$	$I_F=20\text{A}, T_A=25^\circ\text{C}$	0.63	0.75	0.84	V

Note:1. Pulse test: 300 μs pulse width, 1% duty cycle.

SchottkyBarrierRectifiers

MBRB2020-MBRB20100

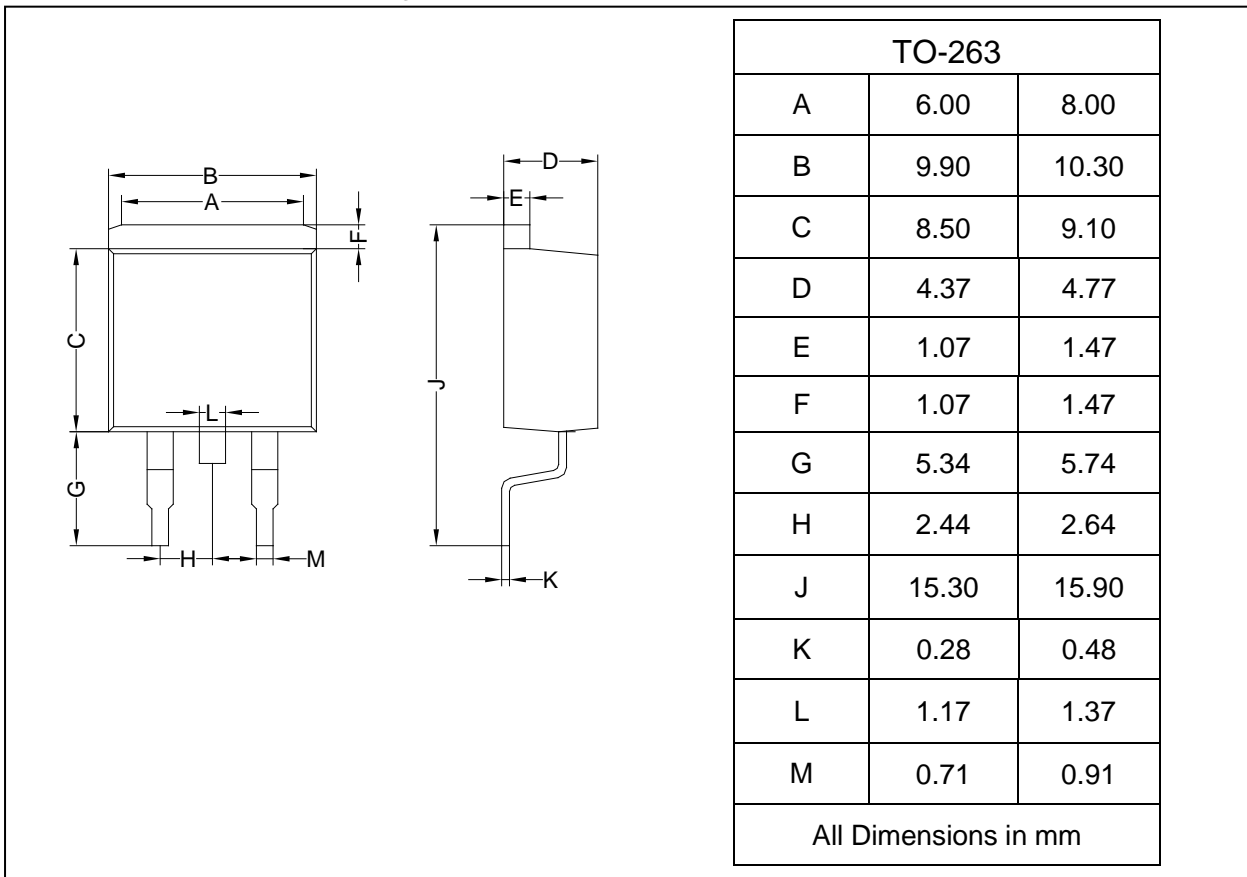
TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



PACKAGE OUTLINE

Plastic surface mounted package

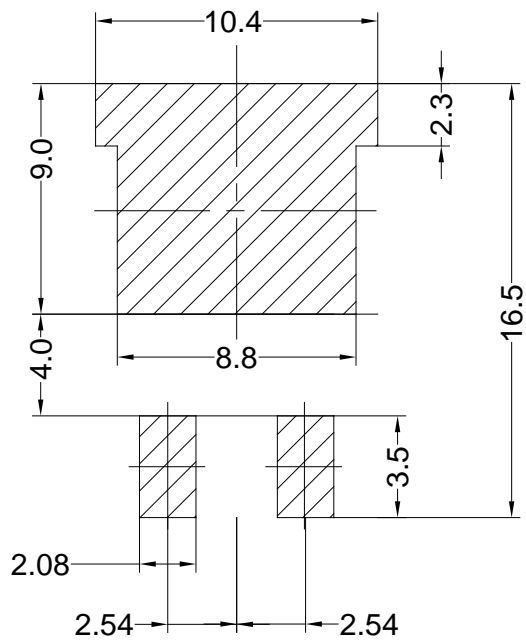
TO-263



SchottkyBarrierRectifiers

MBRB2020-MBRB20100

SOLDERING FOOTPRINT



Unit:mm