

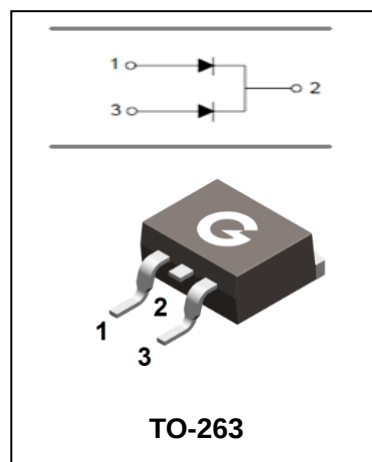
Schottky Barrier Rectifier

MBRB40100CT

FEATURES

- Low forward voltage, high current capability
- High surge capacity
- Low power loss, high efficiency

HF



Ordering Information

Part Number	Package	Shipping	Marking Code
MBRB40100CT	TO-263	50 pcs / Tube or 800 pcs Tape & Reel	MBRB40100CT

MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	Value	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	100	V
$I_{F(AV)}$	Average Forward Current	40	A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave superimposed on rated load	400	A
$R_{\theta JC}$	Typical Thermal Resistance, Junction to Case Per Leg	2.2	°C/W
T_J, T_{STG}	Operating Junction and Storage Temperature Range	-50 to +150	°C

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

Parameter	Symbol	Test conditions	MAX	UNIT
Reverse Current	I_R	$V_{RM}=V_{RRM}, T_J=25^{\circ}\text{C}$ $V_{RM}=V_{RRM}, T_J=125^{\circ}\text{C}$	0.05 10	mA
Forward Voltage	V_F	$I_F=20\text{A}, T_J=25^{\circ}\text{C}$ $I_F=10\text{A}, T_J=125^{\circ}\text{C}$	0.85 0.69	V

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

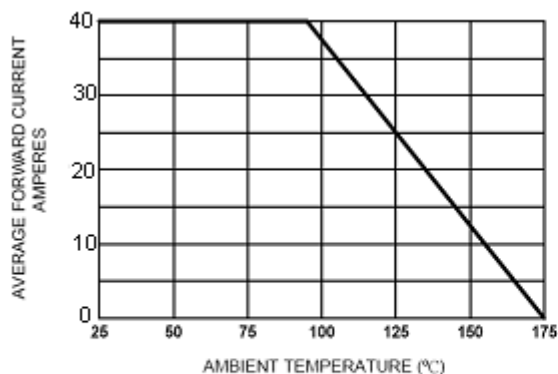


Figure 1. Forward Current Derating Curve

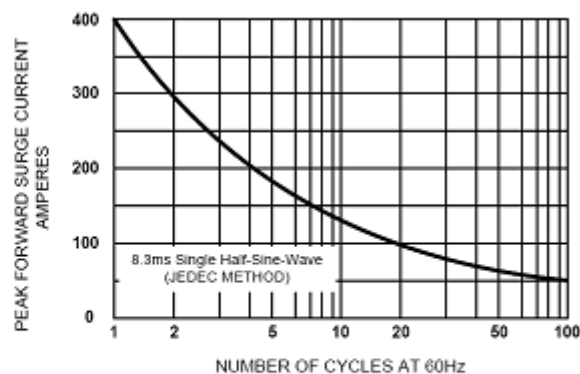


Figure 2. Maximum Non-repetitive Surge Current

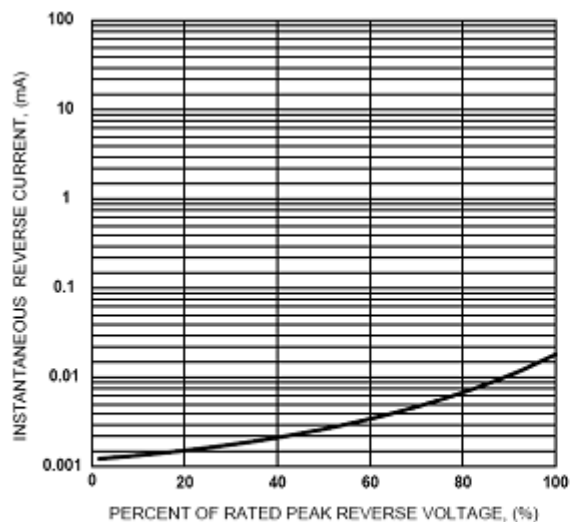


Figure 3. Typical Reverse Characteristics

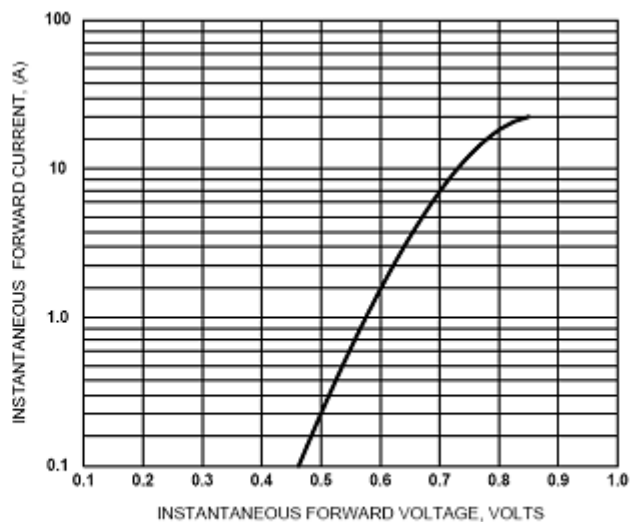


Figure 4. Typical Forward Characteristics

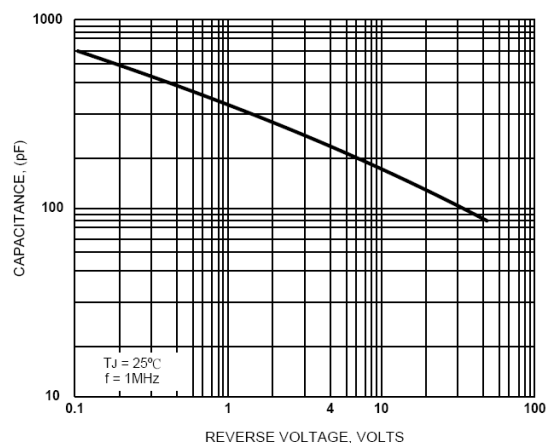


Figure 5. Typical Junction Capacitance

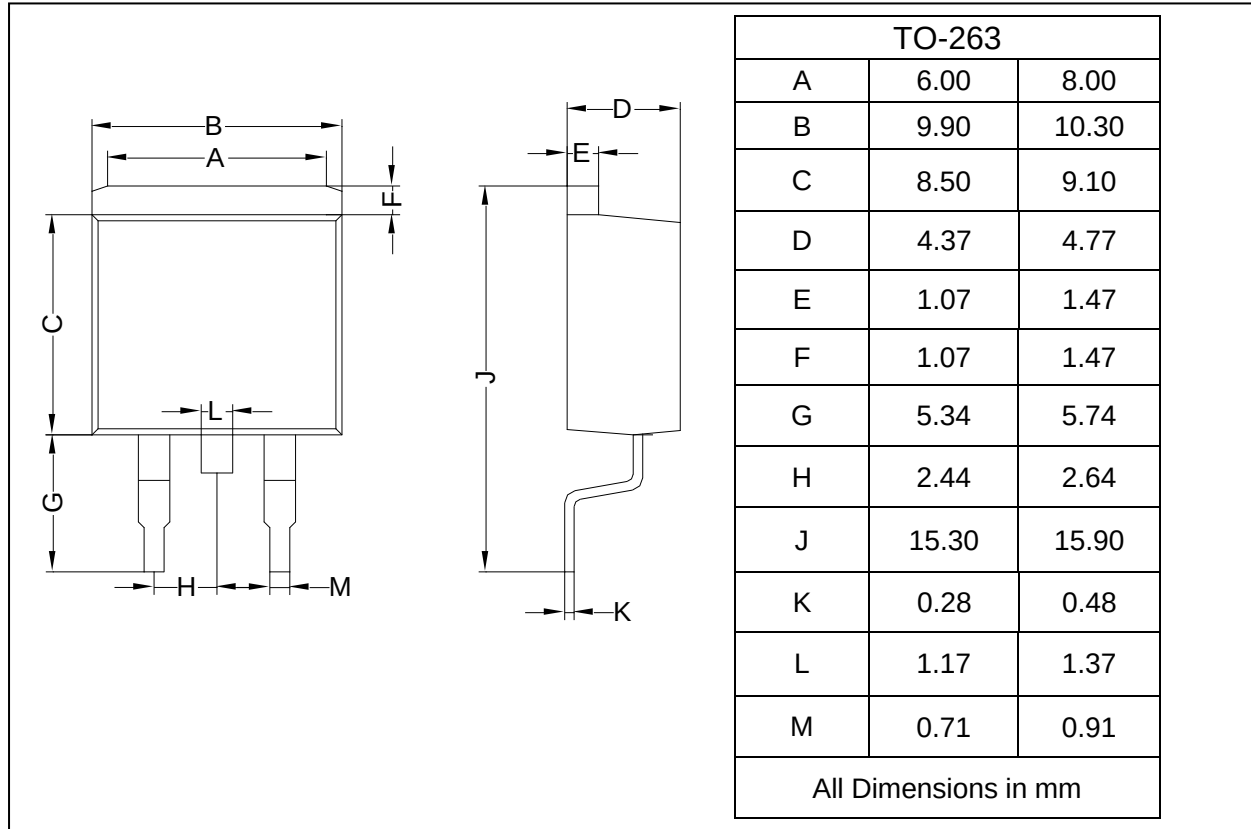
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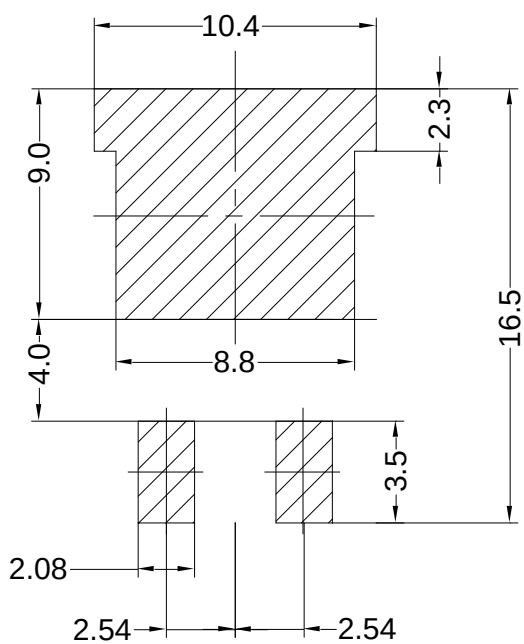
PACKAGE OUTLINE

Plastic surface mounted package

TO-263



SOLDERING FOOTPRINT



Unit: mm