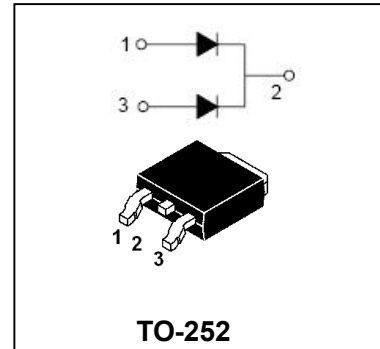


Schottky Barrier Rectifier MBRD2030CT...MBRD20100CT

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, Low Forward Voltage Drop.
- Guard Ring for Over Voltage Protection.



Ordering Information

Part Number	Package	Shipping	Marking Code
MBRD2030CT□	TO-252	80/Tube or2500/Tape Reel	MBRD2030CT
MBRD2035CT□	TO-252	80/Tube or2500/Tape Reel	MBRD2035CT
MBRD2040CT□	TO-252	80/Tube or2500/Tape Reel	MBRD2040CT
MBRD2045CT□	TO-252	80/Tube or2500/Tape Reel	MBRD2045CT
MBRD2050CT□	TO-252	80/Tube or2500/Tape Reel	MBRD2050CT
MBRD2060CT□	TO-252	80/Tube or2500/Tape Reel	MBRD2060CT
MBRD2080CT□	TO-252	80/Tube or2500/Tape Reel	MBRD2080CT
MBRD20100CT□	TO-252	80/Tube or2500/Tape Reel	MBRD20100CT

□: none is for Lead Free package;

“G” is for Halogen Free package.

MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBRD 2030 CT	MBRD 2035 CT	MBRD 2040 CT	MBRD 2045 CT	MBRD 2050 CT	MBRD 2060 CT	MBRD 2080 CT	MBRD 20100 CT	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	30	35	40	45	50	60	80	100	V
V_{RMS}	RMS Voltage	21	25	28	32	35	42	56	70	V
V_{DC}	DC Blocking Voltage	30	35	40	45	50	60	80	100	V
$I_{F(AV)}$	Average Forward Rectified Current@ $T_A=100^{\circ}C$	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)	2.0								$^{\circ}C/W$
T_j T_{stg}	Operating Junction and Storage Temperature Range	-55 to +150								$^{\circ}C$

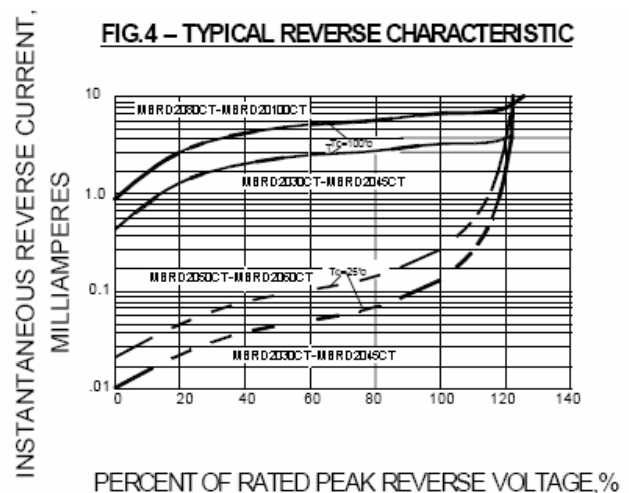
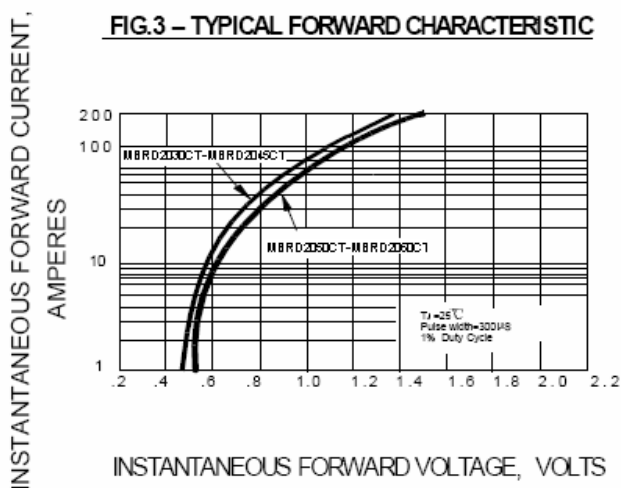
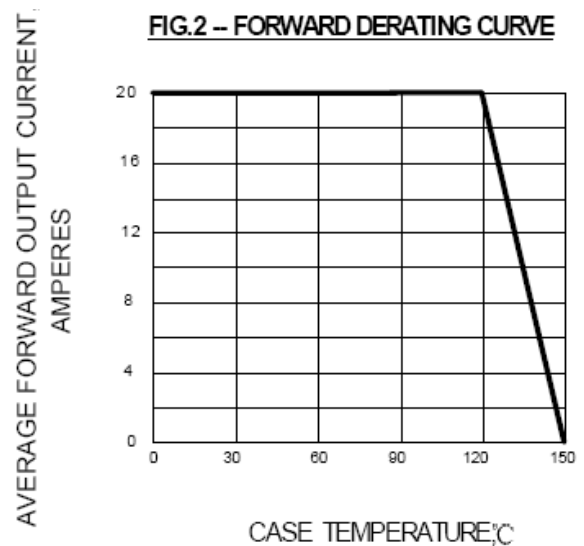
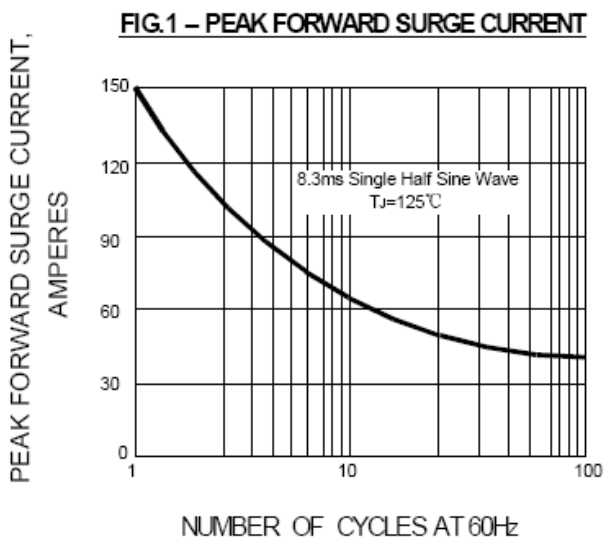
Schottky Barrier Rectifier MBRD2030CT...MBRD20100CT

Note:1. Thermal resistance from junction to case.

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MBRD2030CT- MBRD2045CT	MBRD2050CT- MBRD2060CT	MBRD2080CT- MBRD20100CT	UNIT
			MAX			
Reverse Current	I_R	$V_{RM}=V_{RRM}, T_A=25^\circ\text{C}$ $V_{RM}=V_{RRM}, T_A=125^\circ\text{C}$	0.1 15	0.1 25	0.1 50	mA
Forward Voltage	V_F	$I_F=10\text{A}, T_A=25^\circ\text{C}$ $I_F=10\text{A}, T_A=125^\circ\text{C}$	0.70 -	0.80 0.57	0.85 0.70	V

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

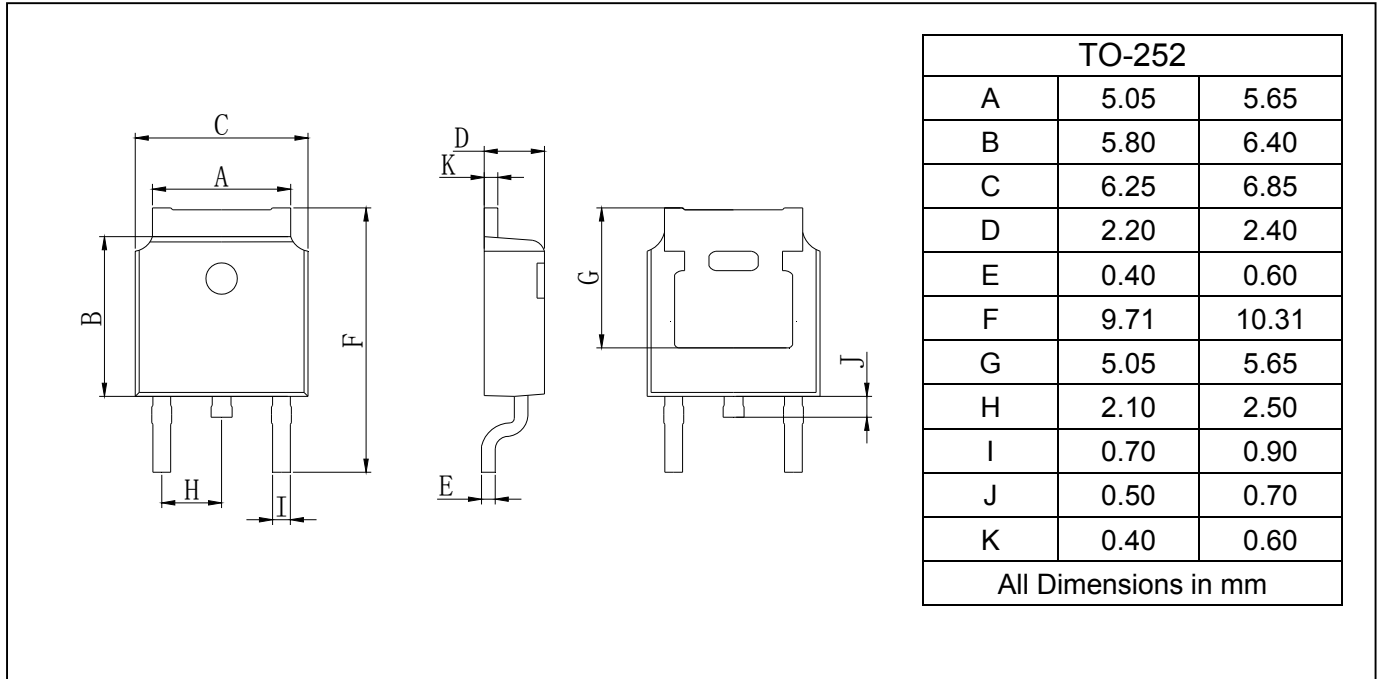


Schottky Barrier Rectifier MBRD2030CT...MBRD20100CT

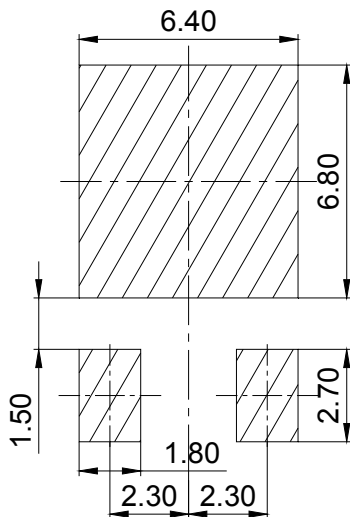
PACKAGE OUTLINE

Plastic surface mounted package

TO-252



SOLDERING FOOTPRINT



Unit:mm