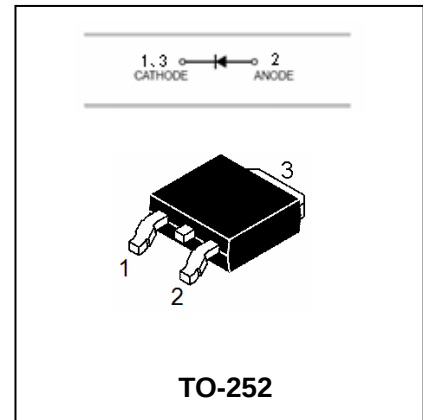


Schottky Barrier Rectifiers

MBRD530-MBRD5100

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.



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBRD 530	MBRD 535	MBRD 540	MBRD 545	MBRD 550	MBRD 560	MBRD 580	MBRD 5100	Unit
V_{RRM}	Rcurrent 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 @ $T_A=100^{\circ}C$	5.0								A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimosed on Rated Load	125								A
$R_{\theta JC}$	Typical Thermal Resistance(Note1)	3.0								$^{\circ}C/W$
T_j T_{stg}	Operating Junction and Storage Temperature Range	-55 to +150								$^{\circ}C$

Note:1.Thermal resistance junction to case.

Schottky Barrier Rectifiers

MBRD530-MBRD5100

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

Parameter	Symbol	Test conditions	MAX			UNIT
			MBRD530- MBRD545	MBRD550- MBRD560	MBRD580- MBRD5100	
Forward Voltage	V_F (Note1)	$I_F=5\text{A}$	0.70	0.80	0.85	V
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

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

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

FIG.1 – FORWARD CURRENT DERATING CURVE

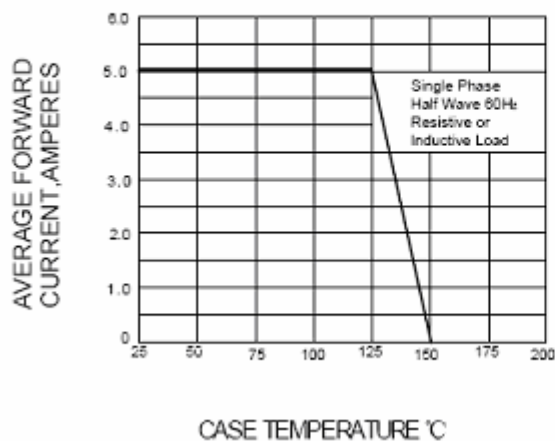


FIG.2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

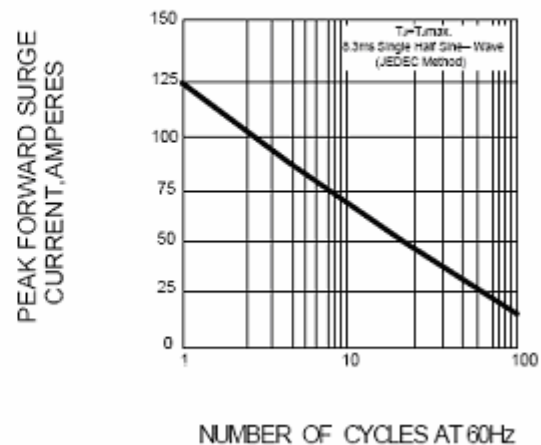


FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC PER LEG

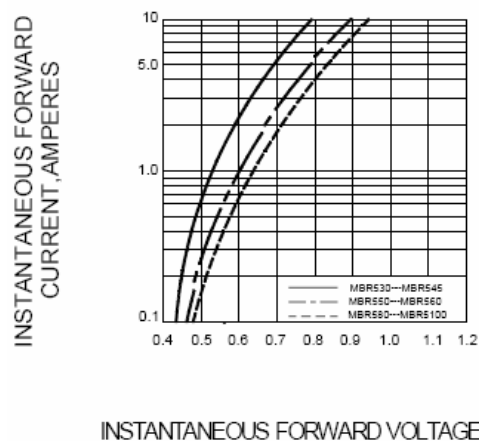
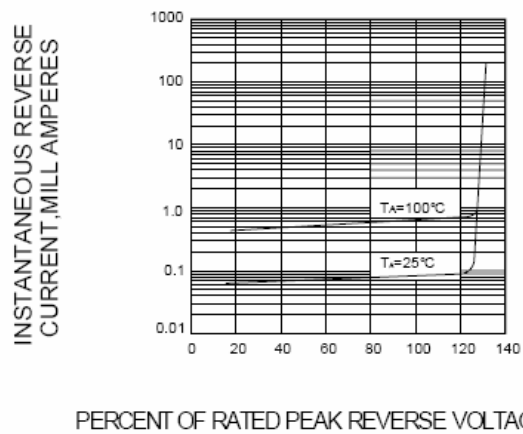


FIG.4 – TYPICAL REVERSE CHARACTERISTICS





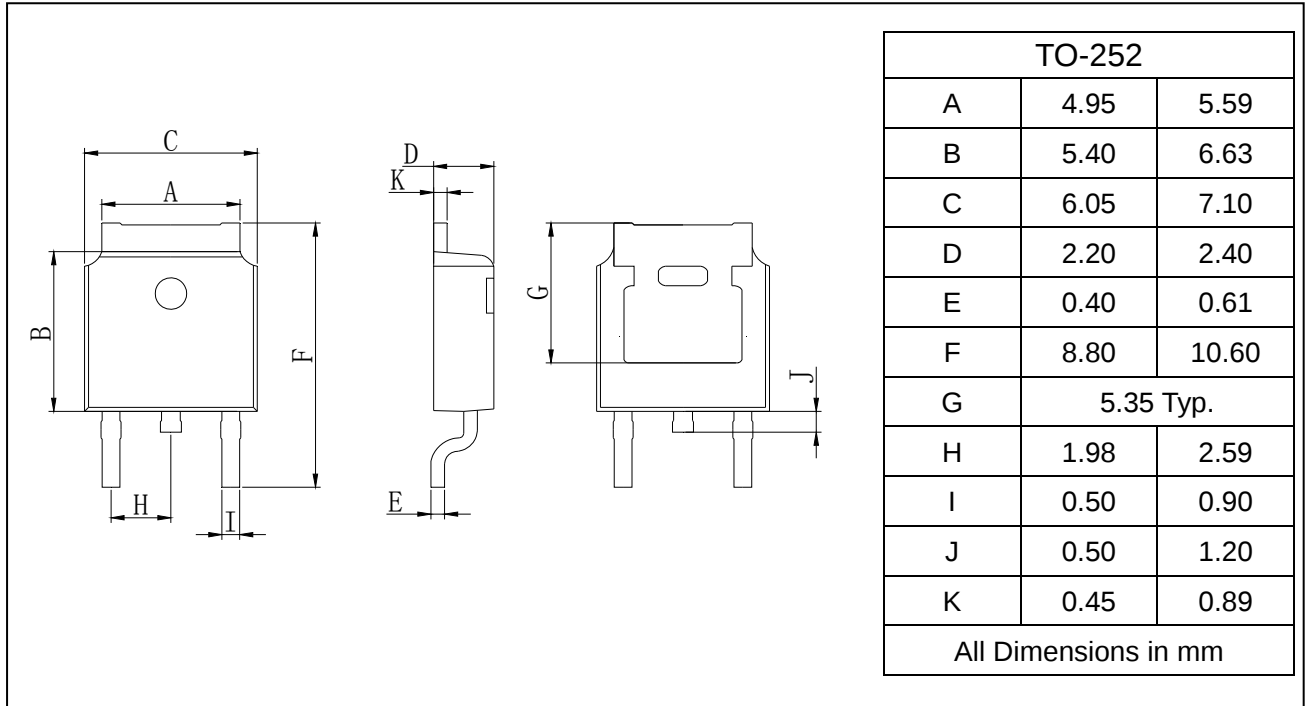
Schottky Barrier Rectifiers

MBRD530-MBRD5100

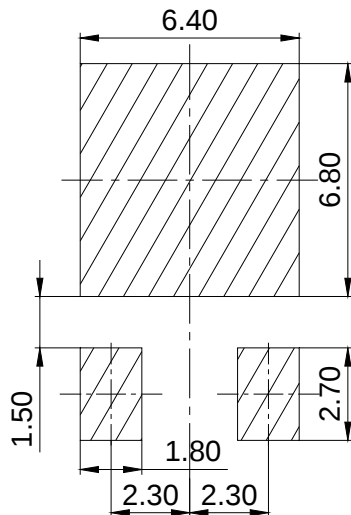
PACKAGE OUTLINE

Plastic surface mounted package

TO-252



SOLDERING FOOTPRINT



Unit:mm



Schottky Barrier Rectifiers

MBRD530-MBRD5100

PACKAGE INFORMATION

Device	Package	Shipping
MBRD530-MBRD5100	TO-252	80PCS/Tube
		2500PCS/Tape&Reel