

## Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Low Power Loss High Efficiency
- High Surge Capacity and High Current Capability
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 3°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRD1520	MBRD1520	20V	14V	20V
MBRD1530	MBRD1530	30V	21V	30V
MBRD1540	MBRD1540	40V	28V	40V
MBRD1545	MBRD1545	45V	31.5V	45V
MBRD1550	MBRD1550	50V	35V	50V
MBRD1560	MBRD1560	60V	42V	60V
MBRD1580	MBRD1580	80V	56V	80V
MBRD15100	MBRD15100	100V	70V	100V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	15A	T <sub>C</sub> =115°C
Peak Forward Surge Current	I <sub>FSM</sub>	150A	8.3ms,Half Sine
Maximum Forward Voltage Drop Per Element MBRD1520-1545 MBRD1550-1560 MBRD1580-15100	V <sub>F</sub>	0.63V 0.75V 0.84V	I <sub>FM</sub> =15 A T <sub>J</sub> =25⁰C
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.1mA	T <sub>J</sub> =25⁰C

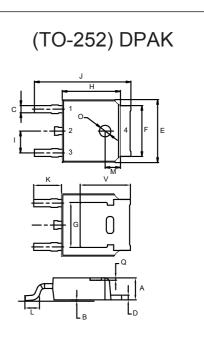
Note :1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

#### **Internal Structure**

-0 PIN 2.4



# 15 Amp Schottky Barrier Rectifier 20 to 100 Volts



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
А	0.087	0.094	2.20	2.40	
В	0.000	0.005	0.00	0.13	
С	0.026	0.034	0.66	0.86	
D	0.018	0.023	0.46	0.58	
Е	0.256	0.264	6.50	6.70	
F	0.201	0.215	5.10	5.46	
G	0.1	0.190		83	
Н	0.236	0.244	6.00	6.20	
I	0.086	0.094	2.18	2.39	
J	0.386	0.409	9.80	10.40	
Κ	0.114		2.90		
L	0.055	0.067	1.40	1.70	
Μ	0.063		1.60		
0	0.043	0.051	1.10	1.30	
Q	0.000	0.012	0.00	0.30	
V	0.211		5.35		



## **Curve Characteristics**

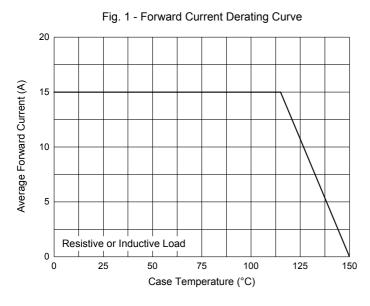
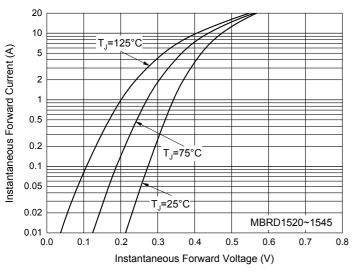
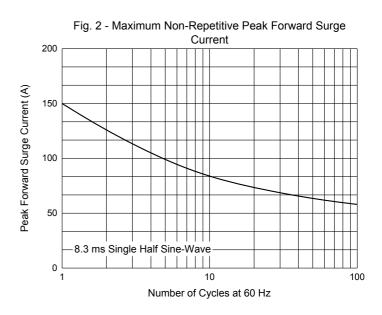
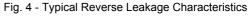
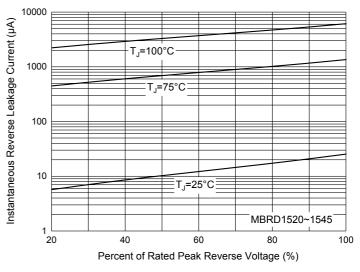


Fig. 3 - Typical Instantaneous Forward Characteristics











## **Ordering Information**

Device	Packing	
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel	

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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