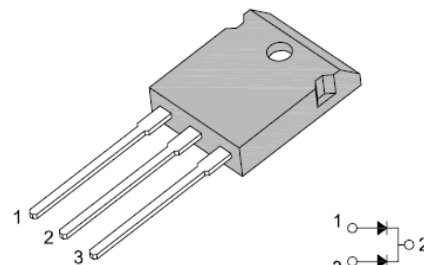


60A Schottky Barrier Rectifiers

Features

- Guarding for over voltage protection
- Lower power losses, high efficiency
- Low forward voltage drop
- High forward surge capability
- High frequency operation
- RoHS compliance



TO-3P



Mechanical Data

Case:	TO-3P, molded plastic body
Epoxy:	Plastic package has UL flammability classification 94V-0
Terminals:	Matte tin plated leads, solderable per J-STD-002 and JESD22-B102
Polarity	As marked
Mounting Position:	Any
Mounting Torque:	10 in-lbs maximum
Weight:	0.22 ounce, 6.2 gram

Maximum Ratings ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	MBR 6030PT	MBR 6035PT	MBR 6040PT	MBR 6045PT	MBR 6050PT	MBR 6060PT	Unit	Conditions
V_{RRM}	Maximum Repetitive Peak Reverse Voltage	30	35	40	45	50	60	V	
V_{RWM}	Working Peak Reverse Voltage	30	35	40	45	50	60	V	
V_{DC}	Maximum DC Blocking Voltage	30	35	40	45	50	60	V	
V_R (RMS)	RMS Reverse Voltage	21	25	28	32	35	42	V	
I_{F(AV)}	Maximum Average Forward Rectified Current per diode	30						A	
		60						A	Total device, Rated V _R , T _C =100° C
I_{FM}	Peak Repetitive Forward Current	60							Rated V _R , Square wave, 20KHz
I_{FSM}	Non-Repetitive Peak Forward Surge Current per diode	500						A	Surge applied at rated load conditions half single wave, 60Hz
T_J	Operating Junction Temperature Range	-65 to +150						° C	
T_{STG}	Storage Temperature Range	-65 to +150						° C	

60A Schottky Barrier Rectifiers

MBR6030PT - MBR6060PT

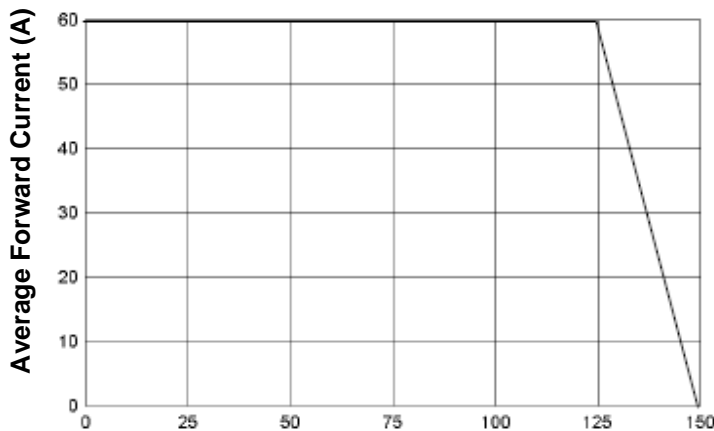
Electrical Characteristics ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	MBR 6030PT	MBR 6035PT	MBR 6040PT	MBR 6045PT	MBR 6050PT	MBR 6060PT	Unit	Conditions
V_F	Maximum Instantaneous Forward Voltage per Diode (Note 1)	0.55				0.70		V	IF=30A, Tc=25°C
		0.48				0.62			IF=30A, Tc=100°C
I_R	Maximum Instantaneous Reverse Current at rated DC Blocking Voltage per Diode (Note 1)	3.0						mA	Rated DC Voltage, Tc=25°C
		80							Rated DC Voltage, Tc=100°C
R_{θ-JC}	Typical Thermal Resistance junction to case	2.0						°C/W	

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

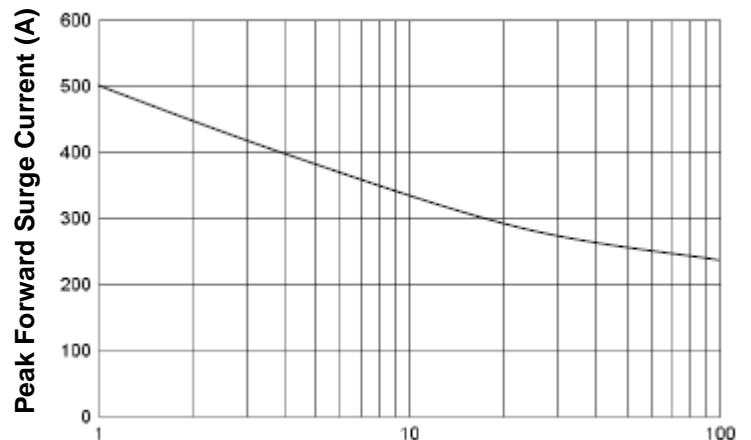
Typical Characteristics Curves

Fig.1- Forward Current Derating Curve



Case Temperature (°C)

Fig.2- Max. Non-Repetitive Peak Forward Surge Current per Diode



Number of Cycles at 60Hz

60A Schottky Barrier Rectifiers

MBR6030PT - MBR6060PT

Fig.3- Typical Instantaneous Forward Characteristics
per Diode

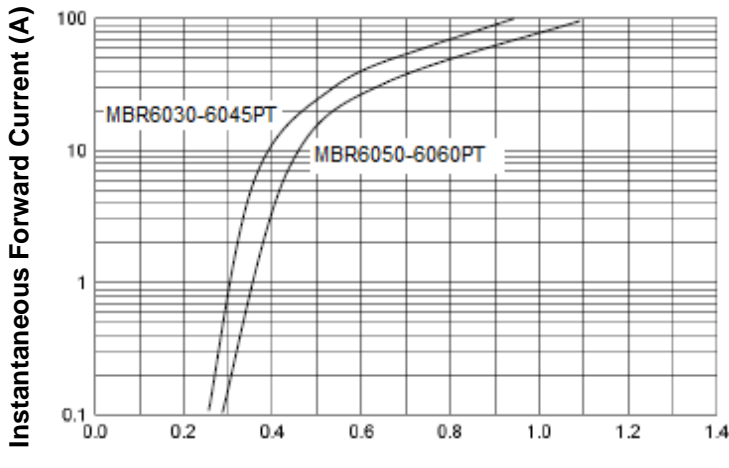
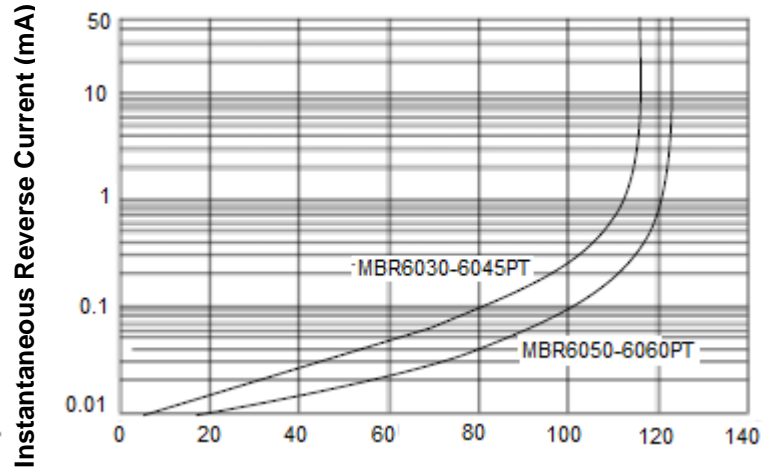


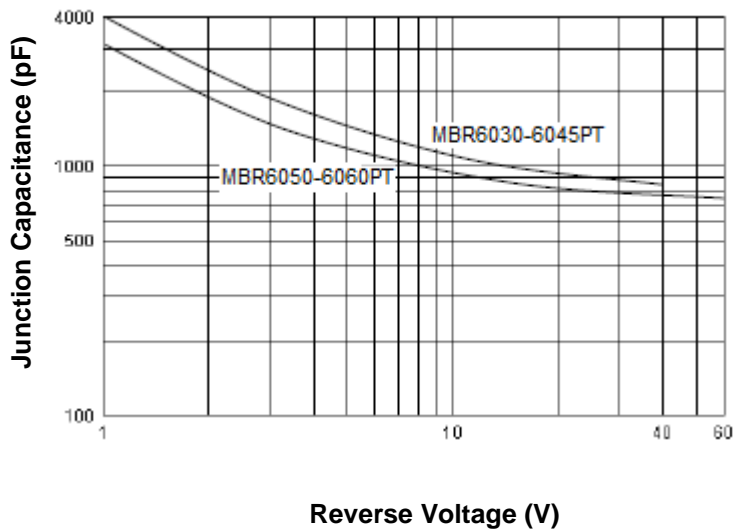
Fig.4- Typical Reverse Characteristics
per Diode



Instantaneous Forward Voltage (V)

Percent of Rated Peak Reverse Voltage (%)

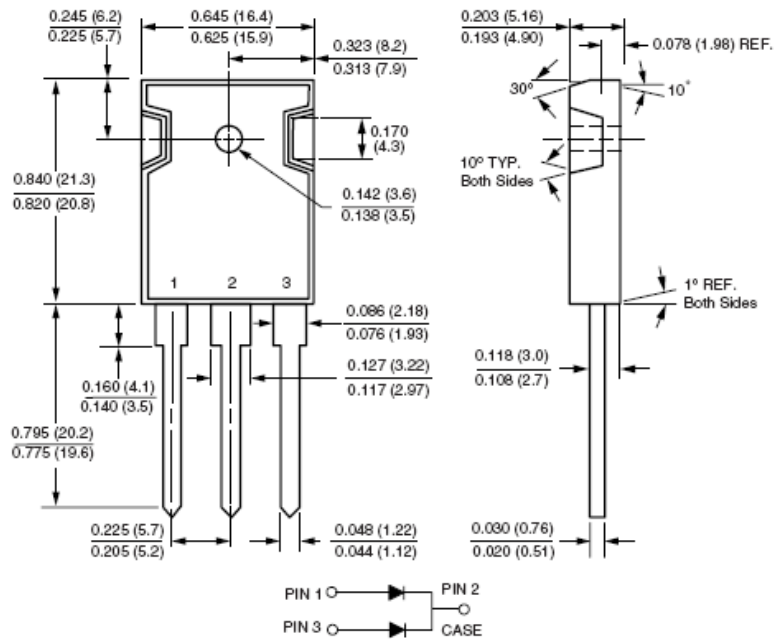
Fig.5- Typical Junction Capacitance
per Diode



60A Schottky Barrier Rectifiers

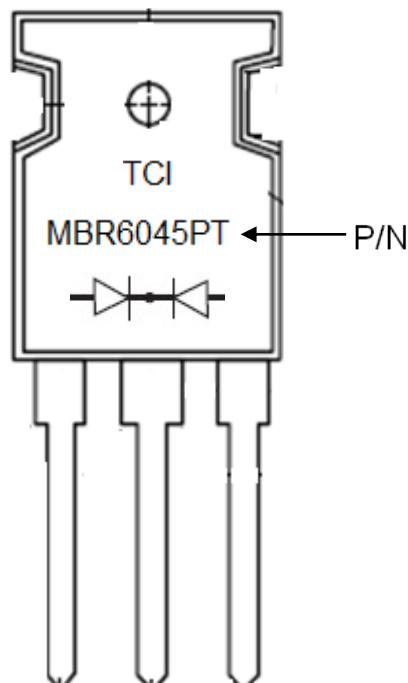
MBR6030PT - MBR6060PT

Dimensions in inches (mm)



TO-3P

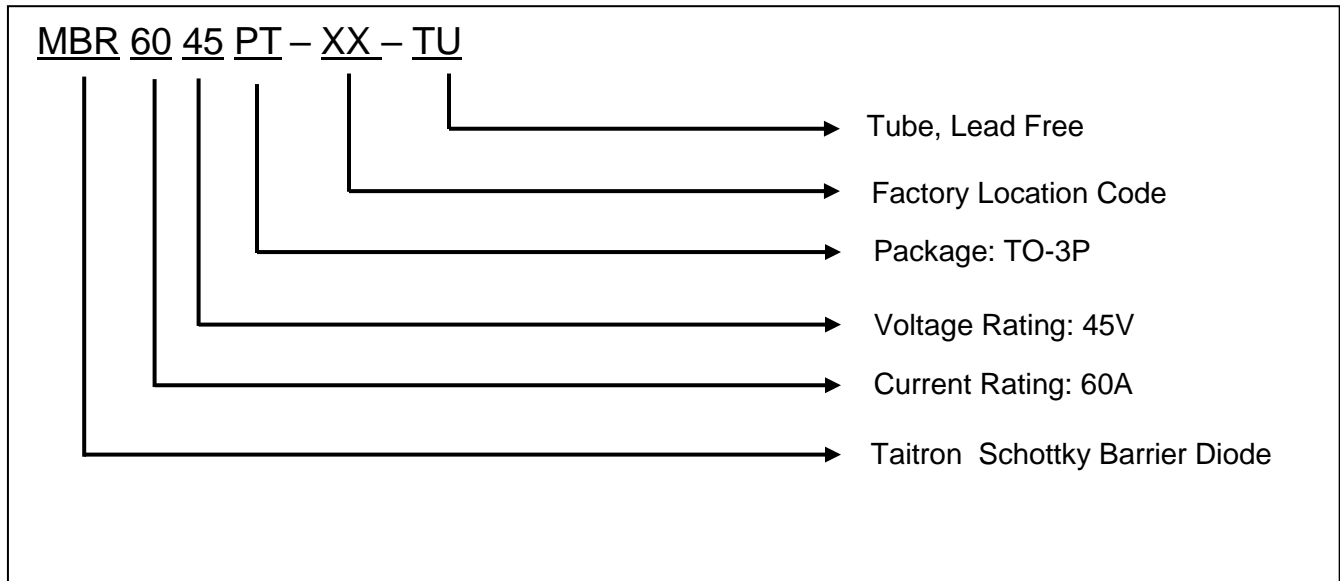
Marking Information:



60A Schottky Barrier Rectifiers

MBR6030PT - MBR6060PT

Ordering Information



How to contact us

USA HEADQUARTERS
28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162
Tel: (800)-TAITRON (800)-824-8766 (661)-257-6060
Fax: (800)-TAITFAX (800)-824-8329 (661)-257-6415
Email: taitron@taitroncomponents.com
Http://www.taitroncomponents.com

TAITRON COMPONENTS INCORPORATED TAIWAN BRANCH
6F., NO.190, SEC. 2, ZHONGXING RD., XINDIAN DIST., NEW TAIPEI CITY 23146, TAIWAN R.O.C.
Tel: 886-2-2913-6238
Fax: 886-2-2913-6239

TAITRON COMPONENT TECHNOLOG SHANGHAI CORPORATION
SUITE 1503, METROBANK PLAZA, 1160 WEST YAN'AN ROAD, SHANGHAI, 200052, CHINA
Tel: +86-21-5424-9942
Fax: +86-21-2302-5027