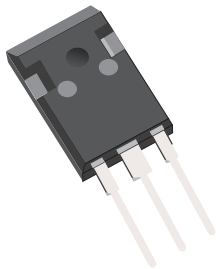
Schottky Barrier Rectifier

MBR6050PT-G Thru. MBR60100PT-G

Reverse Voltage: 50 to 100V

Forward Current: 60.0A

RoHS Device



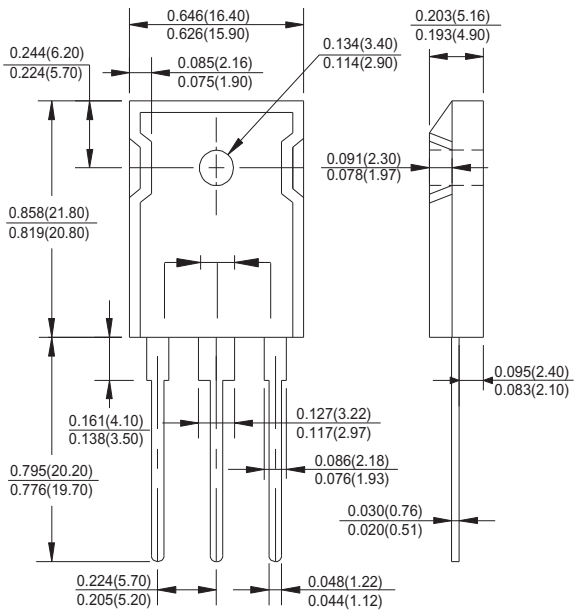
Features

-Metal of silicon rectifier, majority carrier conduction.
-Low power loss, high efficiency.
-High current capability, low forward voltage drop.
-Guardring for overvoltage protection.
-High surge capacity.
-For use in low voltage, high frequency inverters, free wheeling,and polarity protection applications.

Mechanical Data

-Epoxy: UL 94-V0 rate flame retardant.
-Case: JEDEC TO-3P/TO-247AD, molded plastic body
-Polarity: As marked on the body.
-Mounting position: Any
-Weight: 5.6 grams

TO-3P



Dimensions in inches and (millimeter)

Maximum Ratings And Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave ,60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Parameter		Symbol	MBR6050 PT-G	MBR6060 PT-G	MBR60100 PT-G	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	60	80	V
Maximum RMS Voltage		V_{RMS}	35	42	56	V
Maximum DC Blocking Voltage		V_{DC}	50	60	80	V
Maximum Average Forward Rectified Current @Tc=125°C		$I_{(AV)}$	60			A
Peak Forward Surage Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)		I_{FSM}	500			A
Maximum Instantaneous Forward Voltage at (Note 1)	I_F=30A, T_C=25°C	V_F	0.72			V
	I_F=30A, T_C=125°C	V_F	0.62			V
Maximum DC Reverse CurrentAt Rate DC Blocking Voltage	@T_J=25°C	I_R	1.0			mA
	@T_J=100°C	I_R	100			mA
Typical Thermal Resistance (Note 2)		$R_{\theta JC}$	1.2			°C/W
Operating Temperature Range		T_J	-65 to +150			°C
Storage Temperature Range		T_{STG}	-65 to +175			°C

Notes:
1. Pulse Test: 300us pulse width,1% duty cycle.
2. Thermal resistance from junction to case per leg.

Company reserves the right to improve product design , functions and reliability without notice.

Rating and Characteristics Curves (MBR6050PT-G Thru. MBR60100PT-G)

Fig.1- Forward Current Derating Curve

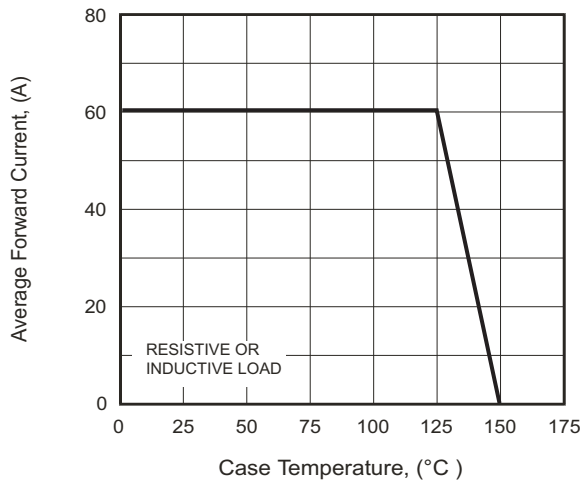


Fig.2- Typical Forward Characteristics

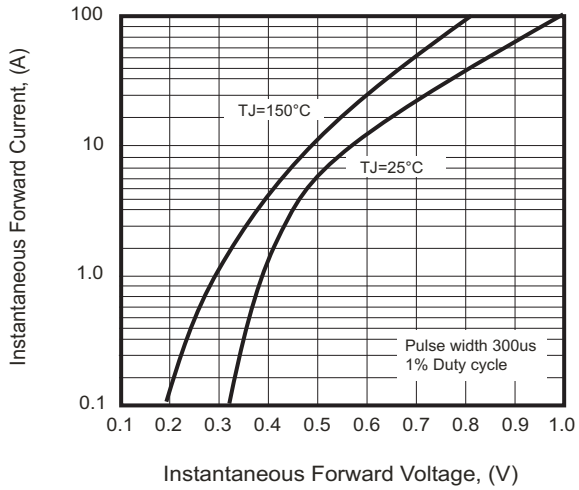


Fig.3- Maximum Non-Repetitive Surge Current

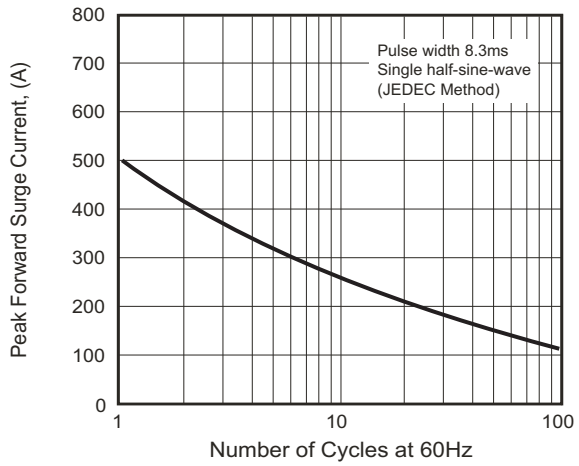
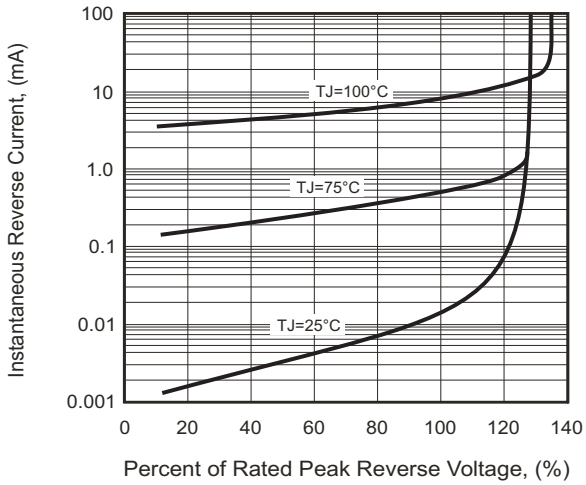
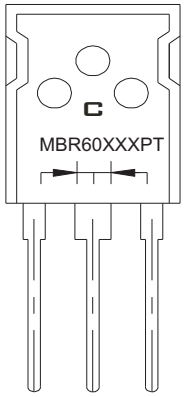


Fig.4- Typical Rever Characteristics



Marking Code

Part Number	Marking code
MBR6050PT-G	MBR6050PT
MBR6060PT-G	MBR6060PT
MBR60100PT-G	MBR60100PT



XX / XXX = Product type marking code
⊏ = Compchip Logo

Standard Packaging

Case Type	BULK PACK	
	BOX (pcs)	CARTON (pcs)
TO-3P	500	2,000