

MBR6035PT - MBR60100PT

60 AMPS. Schottky Barrier Rectifiers

TO-3P/TO-247AD





Features

- UL Recognized File # E-326243
- Plastic material used carries Underwriters Laboratory Classifications 94V-0
- Metal silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection
- High temperature soldering guaranteed: 260°C/10 seconds,0.17"(4.3mm)from case
- Green compound with suffix "G" on packing code & prefix "G" on datecode.

Mechanical Data

- Cases: JEDEC TO-3P/TO-247AD molded plastic body
- Terminals: Pure tin plated, lead free. solderable per MIL-STD-750, Method 2026
- Polarity: As marked
- Mounting position: Any
- Mounting torque: 10 in. lbs. max
- Weight: 6.15 grams

.078(1.98) 840(21.3) OTH SIDES 134(3.4) .086(2.18) 118(3.0) 160(4.1) 795(20.2) 775(19.7) PIN 1 O-PIN 3 O-N

Dimensions in inches and (millimeters)

Marking Diagram MBR60XXPT = Specific Device Code G = Green Compound = Year ww = Work Week

Version: D10

Maximum Ratings and Electrical Characteristics Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

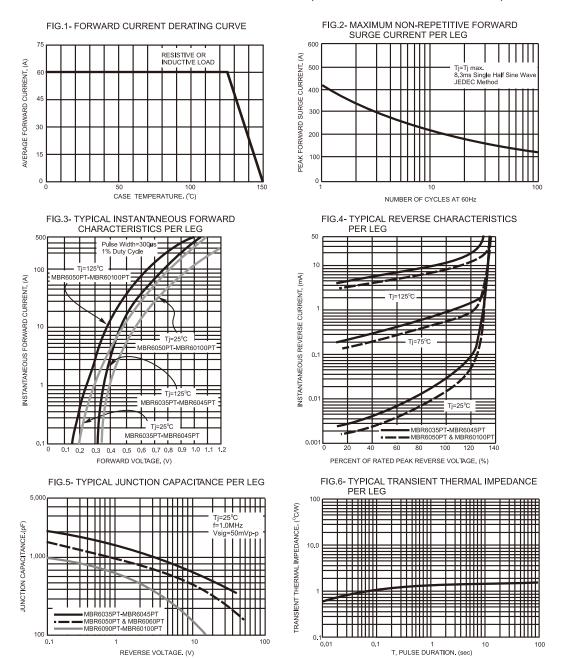
For capacitive load, derate current by 20%

Type Number	Symbol	MBR 6035 PT	MBR 6045 PT	MBR 6050 PT	MBR 6060 PT	MBR 6090 PT	MBR 60100 PT	Units
Maximum Recurrent Peak Reverse Voltage	Vrrm	35	45	50	60	90	100	V
Maximum RMS Voltage	VRMS	24	31	35	42	63	70	V
Maximum DC Blocking Voltage	VDC	35	45	50	60	90	100	V
Maximum Average Forward Rectified Current at Tc=125°C	I F(AV)	60						Α
Peak Repetitive Forward Current (Rated V _R , Square Wave, 20KHz) at Tc=120°C	[FRM	60					Α	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	İfsm	420					А	
Peak Repetitive Reverse Surge Current (Note 2)	IRRM	1.0					Α	
Maximum Instantaneous Forward Voltage at $I_F = 30A, \ TA = 25^{\circ}C$ $I_F = 30A, \ TA = 125^{\circ}C$ $I_F = 60A, \ TA = 25^{\circ}C$	VF	0.70 0.75 0.60 0.65 0.82 0.93		65	0.84 — 0.98		V	
Maximum Instantaneous Reverse Current @TA=25 °C at Rated DC Blocking Voltage Per Leg (Note 1) @ TA=125 °C	lr	1.0		1.0			mA	
		1	0	2	0	1	0	mA
Voltage Rate of Change at (Rated V _R)	dV/dt	10,000						V/uS
Typical Thermal Resistance Per Leg	$R_{ heta JC}$	1.2					°C/W	
Operating Junction Temperature Range	TJ	-65 to +150					°C	
Storage Temperature Range	Tstg	-65 to +175						°C

Notes: 1. Pulse Test: 300us Pulse Width, 1% Duty Cycle 2. 2.0us Pulse Width, f=1.0 KHz



RATINGS AND CHARACTERISTIC CURVES (MBR6035PT THRU MBR60100PT)



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