

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - **30 to 60** Volts
FORWARD CURRENT - **60** Amperes

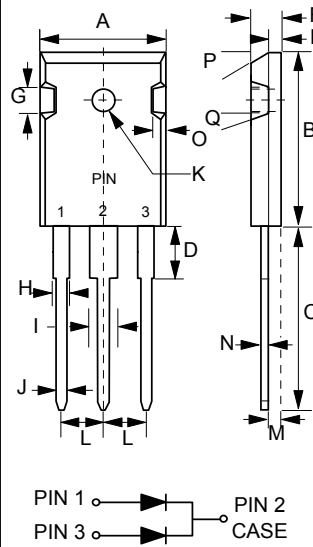
FEATURES

- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free-wheeling, and polarity protection applications

MECHANICAL DATA

- Case : TO-3P molded plastic
- Polarity : As marked on the body
- Weight : 0.2 ounces, 5.6 grams
- Mounting position : Any
- Max. mounting torque = 0.5 N.m (5.1 Kgf.cm)

TO-3P



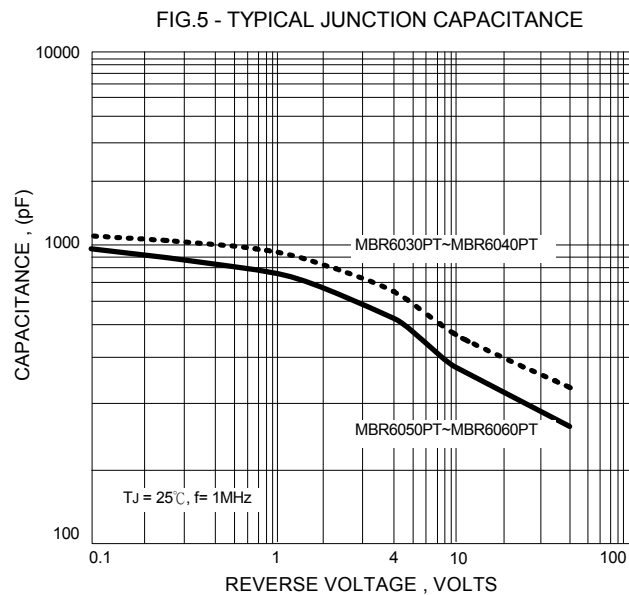
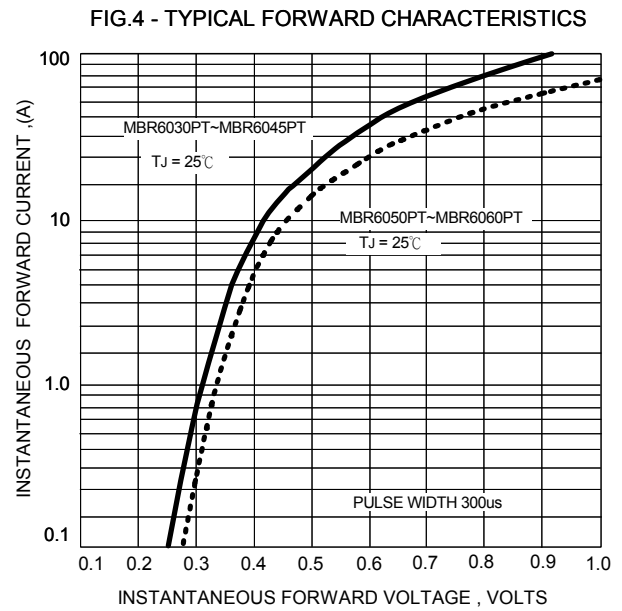
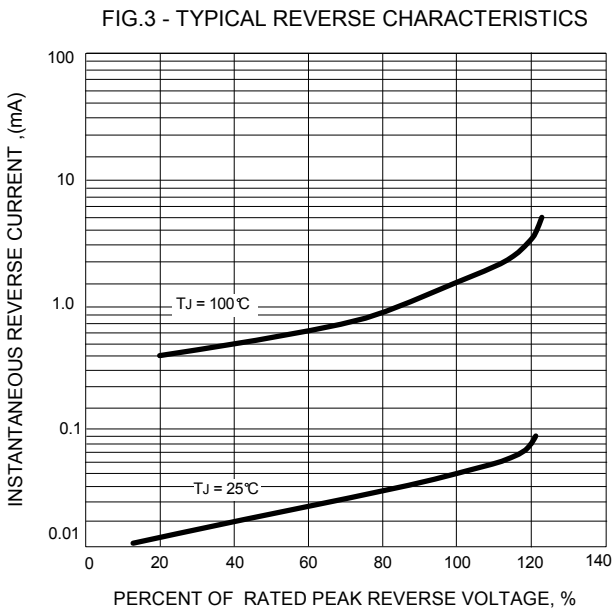
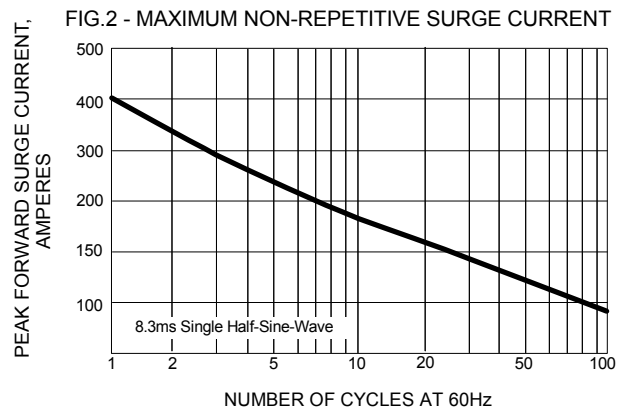
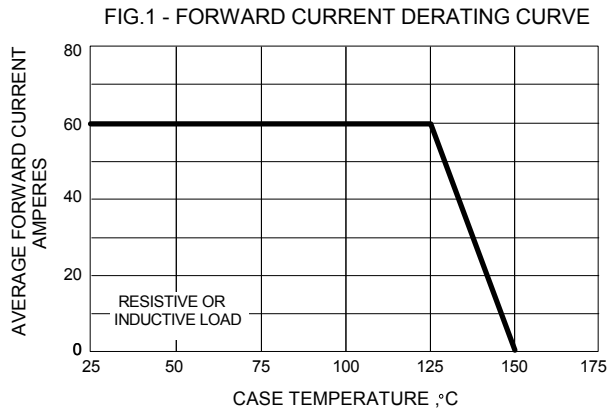
TO-3P		
DIM.	MIN.	MAX.
A	15.75	16.25
B	21.25	21.75
C	19.60	20.10
D	3.78	4.38
E	1.88	2.08
F	4.87	5.13
G	4.4 TYP.	
H	1.90	2.16
I	2.93	3.22
J	1.12	1.22
K	2.90 \varnothing	3.20 \varnothing
L	5.20	5.70
M	2.10	2.40
N	0.51	0.76
O	1.93	2.18
P	20° TYP	
Q	10° TYP	
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	MBR 6030PT	MBR 6035PT	MBR 6040PT	MBR 6045PT	MBR 6050PT	MBR 6060PT	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	30	35	40	45	50	60	V
Maximum RMS Voltage	VRMS	21	24.5	28	31.5	35	42	V
Maximum DC Blocking Voltage	VDC	30	35	40	45	50	60	V
Maximum Average Forward Rectified Current (See Fig.1) @TC=125°C	I(AV)	60						A
Peak Forward Surge Current 8.3ms single half sine-wave @TA=25°C	IFSM	400						A
Maximum Forward Voltage (Note 1)	VF	IF=30A @ TJ=25°C IF=30A @ TJ=125°C		0.62 0.55		0.72 0.65		V
		IF=60A @ TJ=25°C		0.75		0.85		
Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ=25°C @TJ=100°C	IR					1.0 50		mA
Typical Thermal Resistance (Note 2)	RθJC	1.0						°C/W
Typical Junction Capacitance per element (Note 3)	CJ	700				550		pF
Operating Temperature Range	TJ	-55 to +150						°C
Storage Temperature Range	TSTG	-55 to +175						°C

- NOTES : 1. 300us Pulse Width duty cycle 2%.
2. Thermal Resistance Junction to Case.
3. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.



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