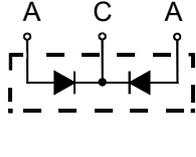
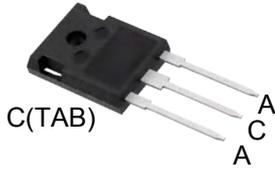


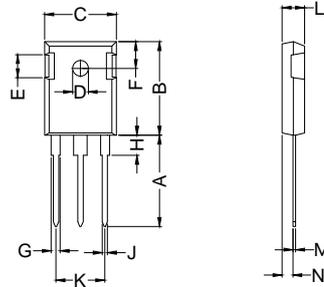
MBR6030PT thru MBR6045PT

High T_{jm} Low IRRM Schottky Barrier Diodes



A=Anode, C=Cathode, TAB=Cathode

Dimensions TO-247AD



Dim.	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	19.81	20.32	0.780	0.800
B	20.80	21.46	0.819	0.845
C	15.75	16.26	0.620	0.640
ØD	3.15	3.65	0.124	0.144
E	4.32	5.49	0.170	0.216
F	5.40	6.30	0.213	0.248
G	1.65	2.18	0.065	0.086
H	3.80	4.50	0.150	0.177
J	1.00	1.40	0.039	0.055
K	10.80	11.10	0.425	0.437
L	4.70	5.30	0.185	0.209
M	0.40	0.80	0.016	0.031
N	1.50	2.49	0.059	0.098

	V _{RRM} V	V _{DC} V
MBR6030PT	30	30
MBR6035PT	35	35
MBR6040PT	40	40
MBR6045PT	45	45

Symbol	Characteristics	Maximum Ratings	Unit
I _(AV)	Maximum Average Forward Rectified Current @T _c =125°C	60	A
I _{FSM}	Peak Forward Surge Current 8.3ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	500	A
V _F	Maximum Forward Voltage (Note 1) I _F =30A @T _J =25°C I _F =30A @T _J =125°C I _F =60A @T _J =25°C	0.62 0.55 0.75	V
I _R	Maximum DC Reverse Current At Rated DC Blocking Voltage @T _J =25°C @T _J =100°C	1.0 50	mA
R _{θJC}	Typical Thermal Resistance (Note 2)	1.0	°C/W
C _J	Typical Junction Capacitance Per Element (Note 3)	700	pF
T _J	Operating Temperature Range	-55 to +150	°C
T _{STG}	Storage Temperature Range	-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.

FEATURES

- * Metal of silicon rectifier, majority carrier conduction
- * Guard ring for transient protection
- * Low power loss, high efficiency
- * High current capability, low V_F
- * 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
- * $\frac{1}{f} \ll t \ll \frac{1}{f}$

MECHANICAL DATA

- * Case: TO-247AD molded plastic
- * Polarity: As marked on the body
- * Weight: 6 grams
- * Mounting position: Any



MBR6030PT thru MBR6045PT

High T_{jm} Low IRRM Schottky Barrier Diodes

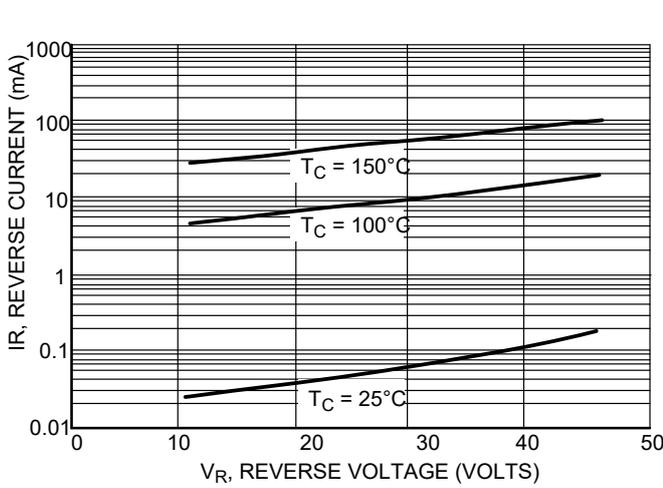


Figure 1. Typical Reverse Current

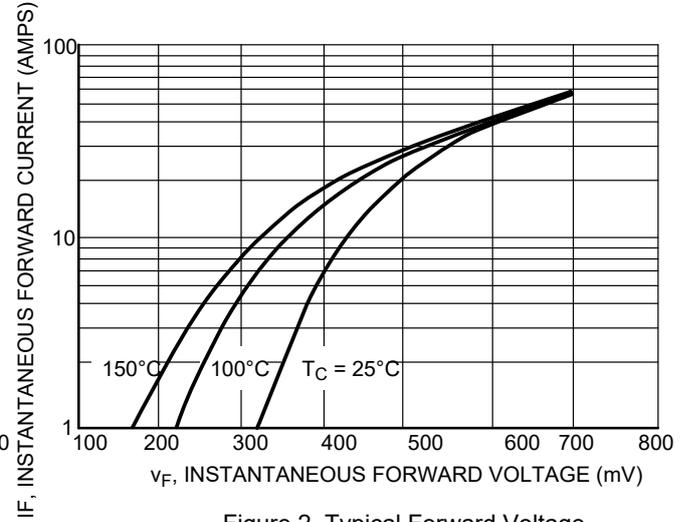
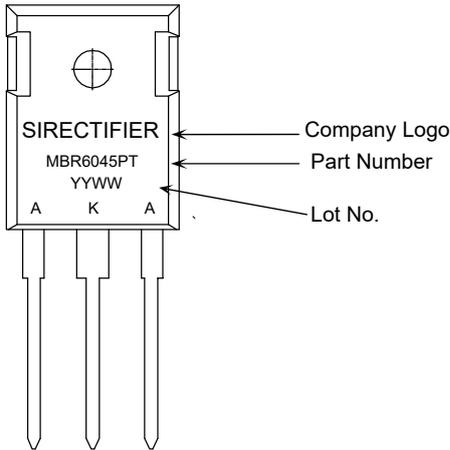


Figure 2. Typical Forward Voltage

MARKING



ORDERING INFORMATION

Part Number	Package	Shipping	Marking Code
MBR6045PT	TO-247AD	30pcs / Tube	MBR6045PT

