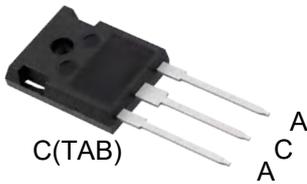
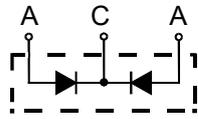


# MBR40200PT

## High T<sub>jm</sub> Low IRRM Schottky Barrier Diodes

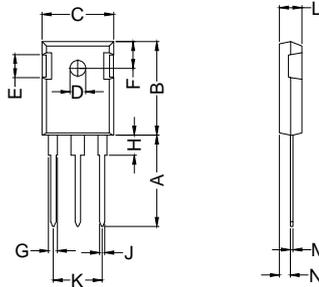


C(TAB)



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 <sub>RRM</sub> V	V <sub>DC</sub> V
<b>MBR40200PT</b>	200	200

Symbol	Characteristics	Maximum Ratings	Unit
I <sub>F(AV)</sub>	Maximum Average Forward Rectified Current @T <sub>c</sub> =145°C	40	A
I <sub>FSM</sub>	Peak Forward Surge Current 10ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	250	A
dv/dt	Voltage Rate Of Change (Rated V <sub>R</sub> )	10000	V/us
V <sub>FM</sub>	Maximum Forward Voltage (Note 1) I <sub>F</sub> =20A @T <sub>J</sub> =25°C I <sub>F</sub> =20A @T <sub>J</sub> =125°C I <sub>F</sub> =40A @T <sub>J</sub> =25°C I <sub>F</sub> =40A @T <sub>J</sub> =125°C	0.86 0.75 0.99 0.85	V
I <sub>RM</sub>	Maximum DC Reverse Current At Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =125°C	0.05 20	mA
R <sub>thJC</sub>	Typical Thermal Resistance (Note 2)	1.15	°C/W
C <sub>T</sub>	Typical Junction Capacitance Per Element (Note 3)	700	pF
T <sub>J</sub>	Operating Temperature Range	-55 to +175	°C
T <sub>STG</sub>	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 conducton
- \* Guard ring for transient protection
- \* Low power loss, high efficiency
- \* High current capability, low V<sub>F</sub>
- \* High surge capacity
- \* For use in low voltage, high frequency inverters, free whelling, and polarity protection applications
- \* RoHS compliant

### MECHANICAL DATA

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



# MBR40200PT

## High $T_{jm}$ Low IRRM Schottky Barrier Diodes

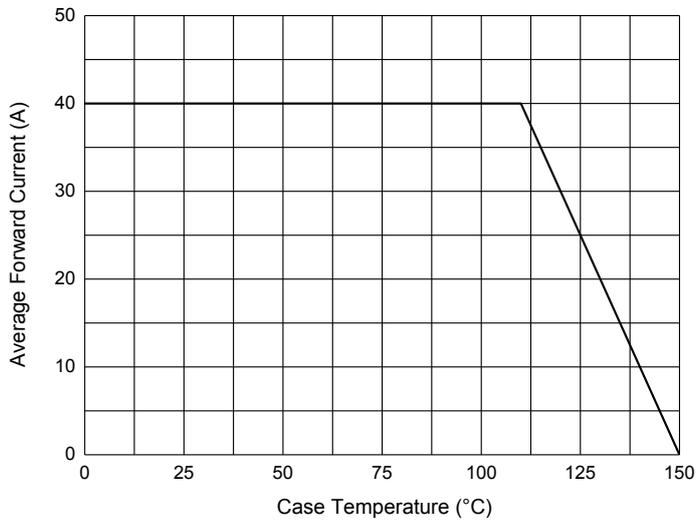


Fig. 1 - Forward Current Derating Curve

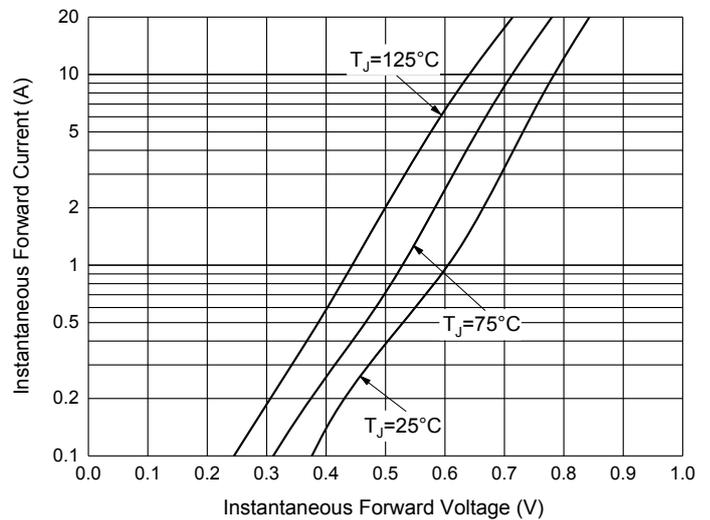


Fig. 2 - Typical Instantaneous Forward Characteristics

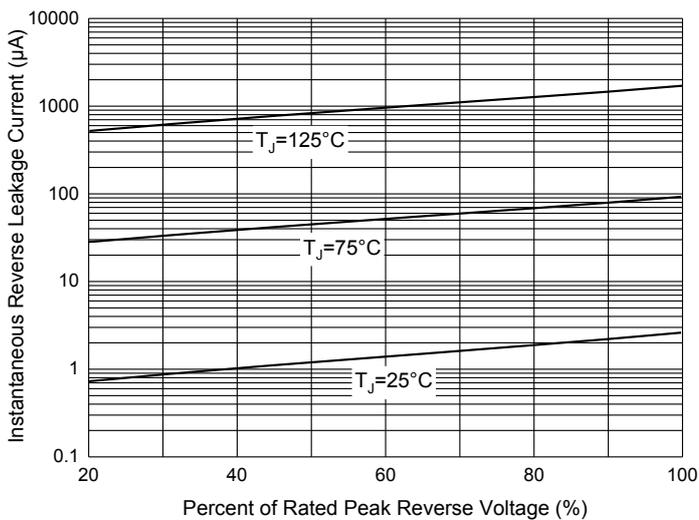
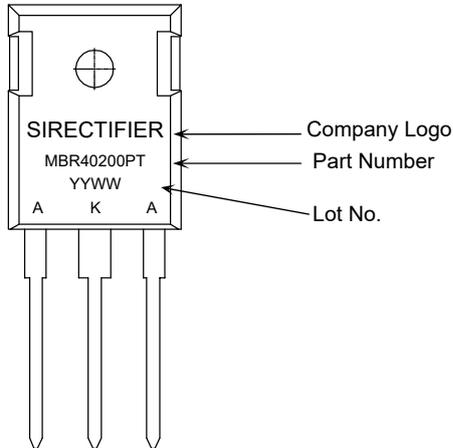


Fig. 3 - Typical Reverse Leakage Characteristics

# MBR40200PT

High Tjm Low IRRM Schottky Barrier Diodes

## MARKING



## ORDERING INFORMATION

Part Number	Package	Shipping	Marking Code
MBR40200PT	TO-247AD	30pcs / Tube	MBR40200PT