

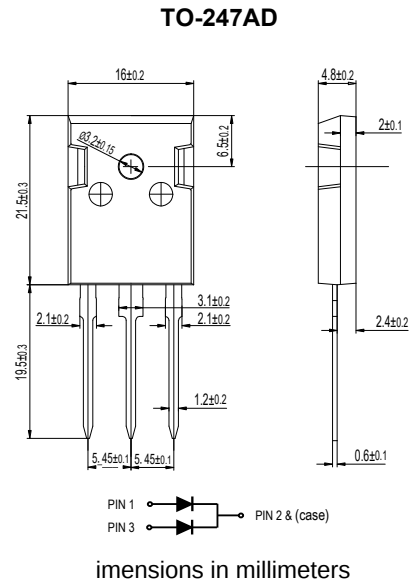
MBR8040PT THRU MBR80200PT Series Schottky Barrier Rectifiers

Features

- High efficiency operation and Low power loss
- Low stored charge majority carrier conduction
- High forward surge capability
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std..(Halogen Free)

Mechanical Data

- Circuit figure: Common Cathode
- Leads: Solderable per mil-std-202, Method 208
- Polarity: as marked
- Mounting torque: 5 in-lbs maximum
- Terminals: Puretin plated
- Weight: 5.85 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C)

RATINGS	SYMBOL	MBR8040PT	MBR8045PT	MBR8060PT	MBR80100PT	MBR80150PT	MBR80200PT	UNIT
Maximum repetitive reverse voltage	VRRM	40	45	60	100	150	200	V
Maximum RMS voltage	VRMS	28	32	42	70	105	140	V
Maximum DC blocking voltage	VDC	40	45	60	100	150	200	V
Maximum average forward current per device per diode	IAV	80 40						A
Peak forward surge current, 8 .3ms single half sine-wave superimposed on rated load	IFSM	500						A
Typical thermal resistance (Note 1)	Rθ-JC	1.5						°C/W
Operating junction temperature range	TJ	-55 to +150				-55 to +175		°C
Storage temperature range	TSTG	-55 to +175						°C
CHARACTERISTICS	SYMBOL	MBR8040PT	MBR8045PT	MBR8060PT	MBR80100PT	MBR80150PT	MBR80200PT	UNIT
Maximum forward voltage per leg IF=30A IF=40A	VF	0.60 0.65		0.70 0.75	0.80 0.85	0.88 0.95		V
Maximum average reverse current at rated DC blocking voltage TJ=25°C TJ=100°C	IR	0.10 30			0.02 10	0.01 5		mA

Notes: 1.Thermal resistance from junction to case.

Typical Characteristic

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

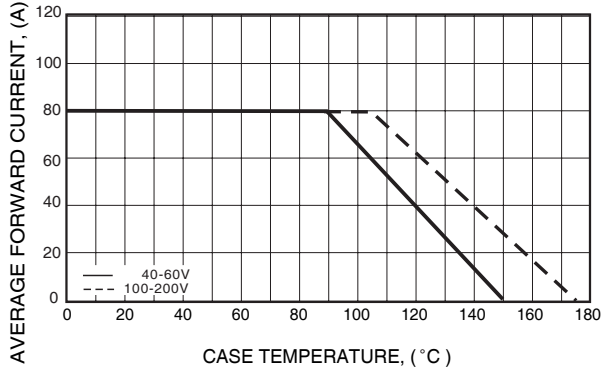


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

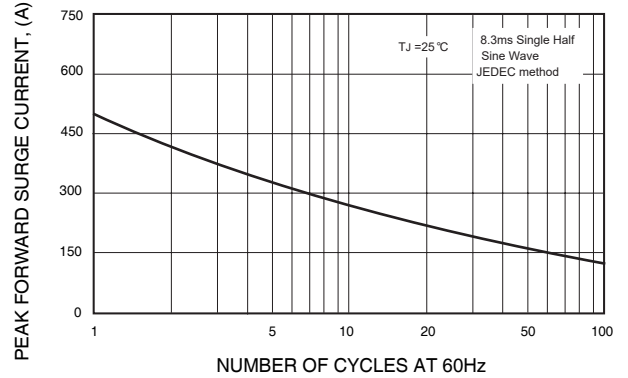


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

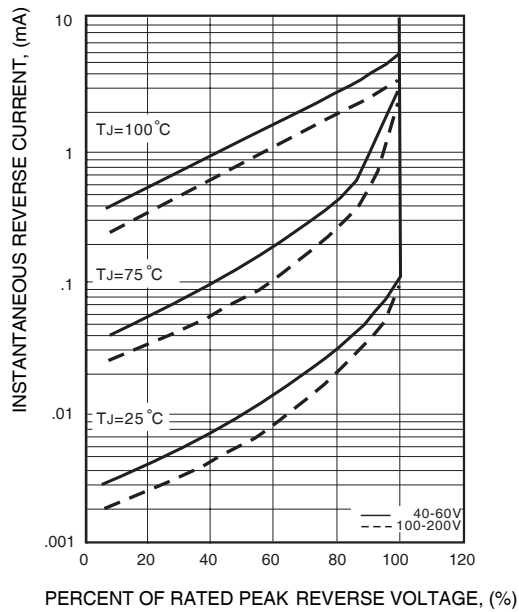


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

