

MBR10H40CT - MBR10H200CT SCHOTTKY BARRIER RECTIFIERS

VOLTAGE RANGE: 40 - 200V CURRENT: 10 A

Features

- High efficiencty operation
- 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

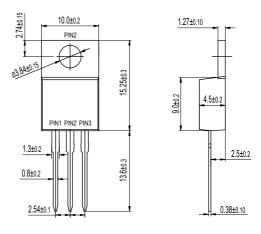
Polarity: as marked

Mounting torque: 5 in-lbs maximum

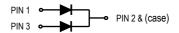
Terminals: Puretin platedWeight: TO-220AB 1.85 grams







TO-220AB



Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

RATINGS	SYMBOL	MBR 10H40CT	MBR 10H45CT	MBR 10H60CT	MBR 10H100CT	MBR 10H150CT	MBR 10H200CT	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 per device forward current per diode	lav	10 5						А
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	lғsм	125						А
Typical thermal resistance (Note 1)	Re-Jc	2.0						°C/W
Operating junction temperature range	TJ	-55 to +150 -55 to +175					to +175	°C
Storage temperature range	Тѕтс	-55 to +175						°C
Maximum forward voltage per leg at IF=5A	VF	0.65		0.75	0.85	0.92		V
Maximum average reverse current at rated DC blocking TJ=25°C TJ=125°C	IR	0.10 15			0.01 5			mA

Notes: 1. Thermal resistance from junction to case.

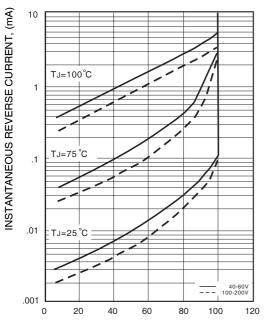


FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE AVERAGE FORWARD CURRENT, (A) 8 40-60V 100-200V 20 40 100 120 140 160

FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE **CURRENT** PEAK FORWARD SURGE CURRENT, (A) 250 8.3ms Single Hall Sine Wave JEDEC meth 200 150 100 50 0 5 10 20 50 100 NUMBER OF CYCLES AT 60Hz

FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

CASE TEMPERATURE, (°C)



PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)

