

MBR4045FCT THRU MBR40200FCT

SCHOTTKY BARRIER RECTIFIER

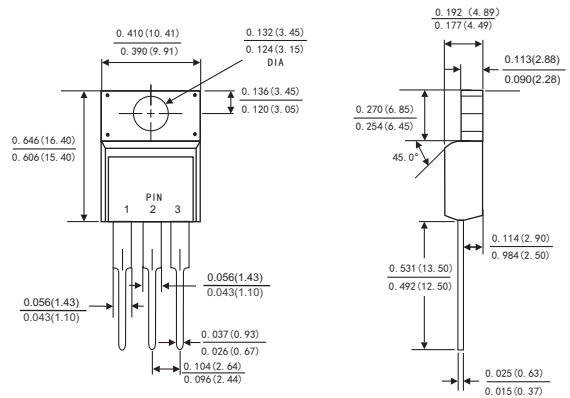
Reverse Voltage - 45 to 200 Volts

Forward Current - 40.0Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/EU

ITO-220AB



MECHANICAL DATA

- Case: JEDEC ITO-220AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25 °C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

Parameters	Symbols	MBR4045FCT	MBR4060FCT	MBR40100FCT	MBR40150FCT	MBR40200FCT	Units
Maximum repetitive peak reverse voltage	VRRM	45	60	100	150	200	Volts
Maximum RMS voltage	VRMS	32	42	70	105	140	Volts
Maximum DC blocking voltage	VDC	45	60	100	150	200	Volts
Maximum average forward rectified current See Fig. 1	Per leg Total device	20.0 40.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	300.0					Amps
Maximum instantaneous forward voltage at 20.0 A	VF	0.60	0.75	0.85	0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	TA=25°C	100					μ A
	TA=100°C	5					mA
	TA=125°C	-					mA
Typical thermal resistance (Note 2)	RθJC	4.5					°C/W
Operating junction temperature range	TJ	-55 to+150					°C
Storage temperature range	TSTG	-55 to+150					°C

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle

2.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

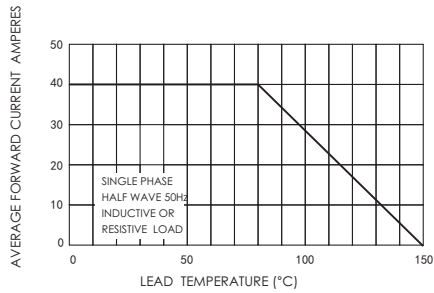


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

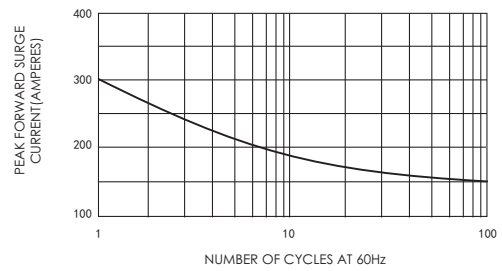


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

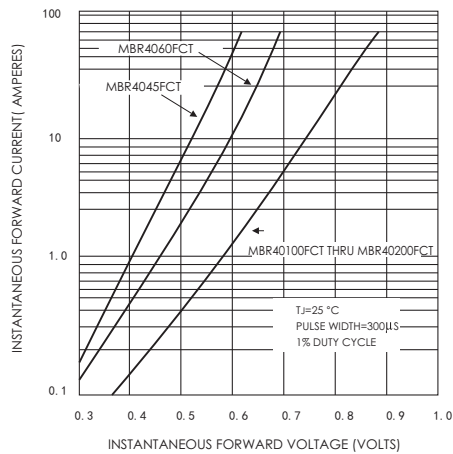


FIG.4-TYPICAL REVERSE CHARACTERISTICS

