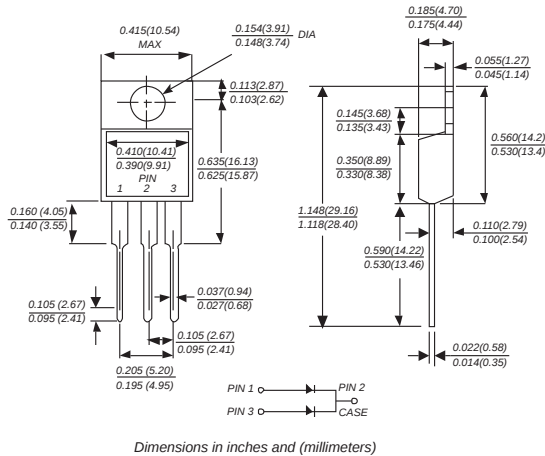


MBR3040FCT THRU MBR30200FCT

SCHOTTKY BARRIER RECTIFIER

ITO-220AB



FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250°C, 0.25”(6.35mm) from case for 10 seconds

MECHANICAL DATA

Case: TO-220AB molded plastic body
Terminals: Leads solderable per MIL-STD-750, Method 2026
Polarity: As marked
Mounting Position: Any
Weight: 0.08 ounce, 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	MBR 3040FCT	MBR 3045FCT	MBR 3060FCT	MBR 30100FCT	MBR 30150FCT	MBR 30200FCT	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	40	45	60	100	150	200	VOLTS
Maximum RMS voltage	V _{RMS}	28	32	42	70	105	140	VOLTS
Maximum DC blocking voltage	V _{DC}	40	45	60	100	150	200	VOLTS
Maximum average forward rectified current at Tc(see fig.1)	I _{AV}	30.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	250.0						Amps
Maximum instantaneous forward voltage at 15.0A	V _F	0.65		0.75	0.85	0.95		Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	1.0						mA
		15.0		50.0				
Typical junction capacitance (NOTE 1)	C _J	550		450				pF
Typical thermal resistance (NOTE 2)	R _{qJC}	2.0						°C/W
Operating junction temperature range	T _J	-65 to +150		-65 to +175				°C
Storage temperature range	T _{STG}	-65 to +150						°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. Thermal resistance from junction to case

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

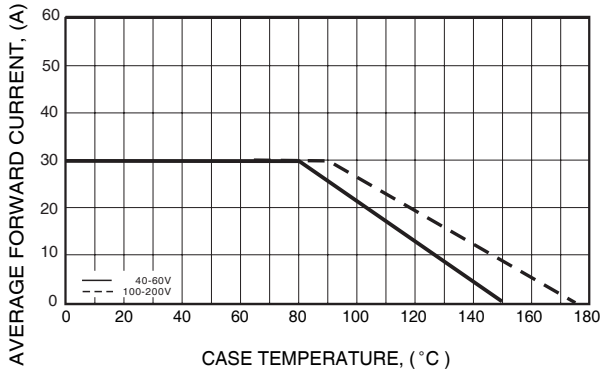


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

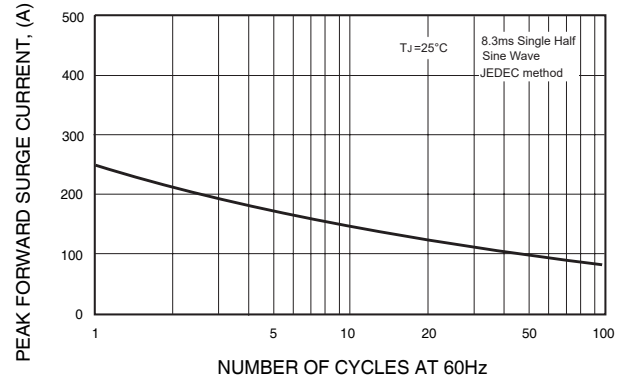


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

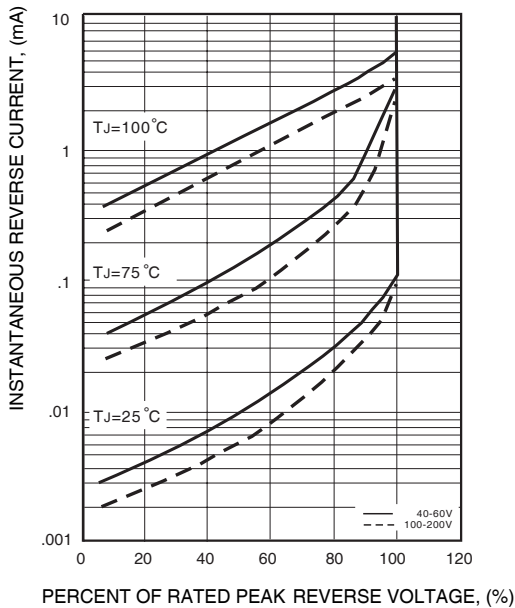


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

