



MBR3040PT THRU MBR30200PT

Surface Mount Schottky Rectifiers

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/10 seconds at terminals

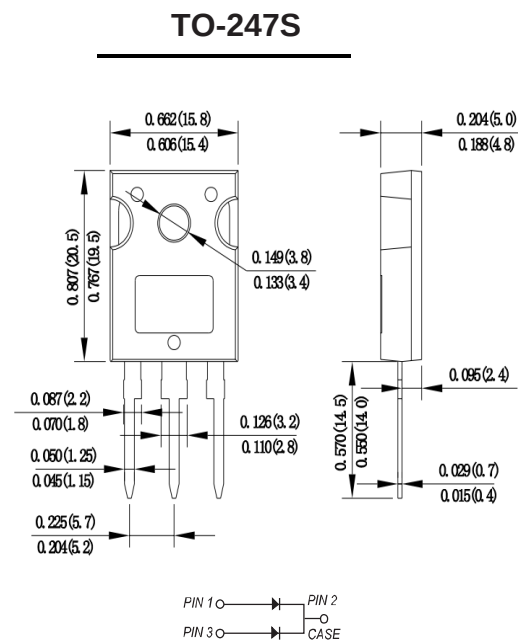
Mechanical Data

Case : Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

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 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	MBR 3040PT	MBR 3045PT	MBR 3060PT	MBR 30100PT	MBR 30150PT	MBR 30200PT	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	40	45	60	100	150	200	V
Maximum RMS voltage	V _{RMS}	28	31.5	42	70	105	140	V
Maximum DC blocking voltage	V _{DC}	40	45	60	100	150	200	V
Maximum average forward rectified current at T _c =110°C per device per diode	I _(AV)	30.0 15.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	200.0						A
Maximum instantaneous forward voltage per diode at 15.0A	V _F	0.55		0.70	0.85	0.95		V
Maximum DC reverse current at rated DC blocking voltage T _A =25°C T _A =125°C	I _R	0.5 50			0.05 10			m A
Typical thermal resistance	R _{θJC}	2.8						°C/W
Operating junction temperature range	T _J	-55 to +150						°C
Storage temperature range	T _{STG}	-55 to +150						°C



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Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

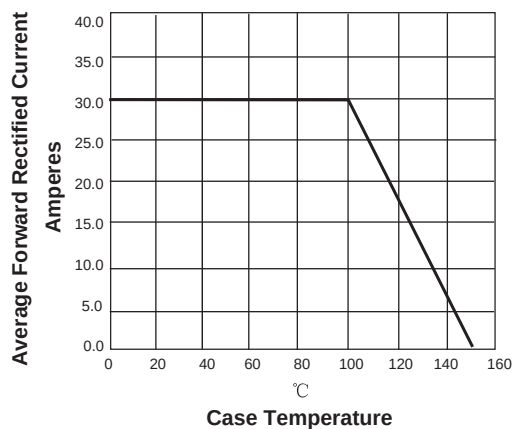


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

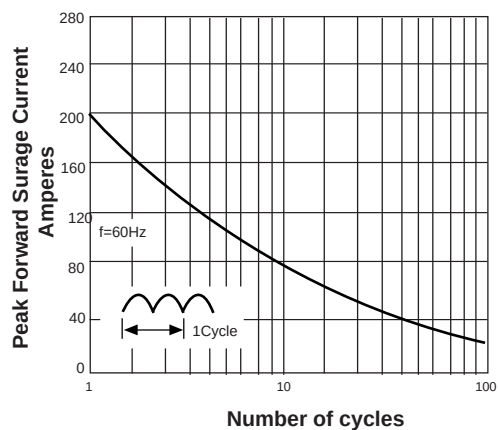


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

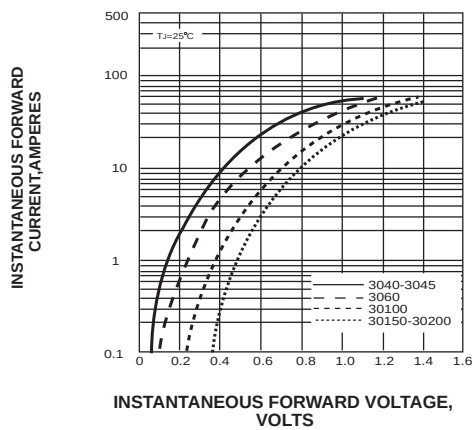


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

