

Schottky Barrier Rectifiers

Reverse Voltage - 40 to 200 V

Forward Current - 60A

Features

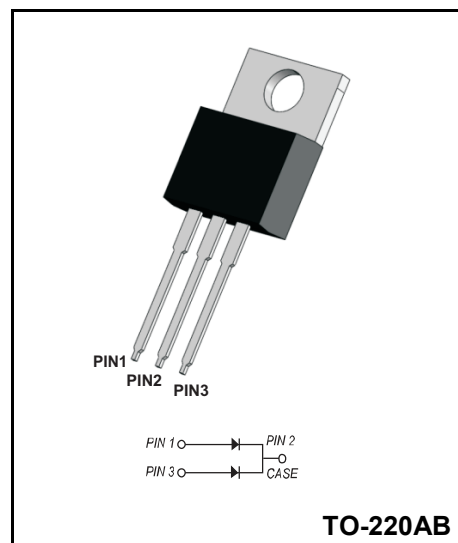
- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-O
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed 260°C/10 seconds at terminals

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

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%.



CHARACTERISTICS		SYMBOLS	MBR6040 CT	MBR6045 CT	MBR6060 CT	MBR60100 CT	MBR60150 CT	MBR60200 CT	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 Tc=110℃	Per device	I _(AV)	60						A
	Per diode		30						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load		I _{FSM}	300						A
Maximum instantaneous forward voltage per diode at 30.0A		V _F	0.65		0.75	0.90	1.0		V
Maximum DC reverse current Ta=25℃ at rated DC blocking voltage Ta=125℃		I _R	0.5 50			0.05 10			mA
Typical Thermal Resistance		R _{θJA}	3.5						℃/W
Operation Junction Temperature Range		T _j	-55 ~ +150						℃
Storage Temperature Range		T _{stg}	-55 ~ +150						℃

Ratings and Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

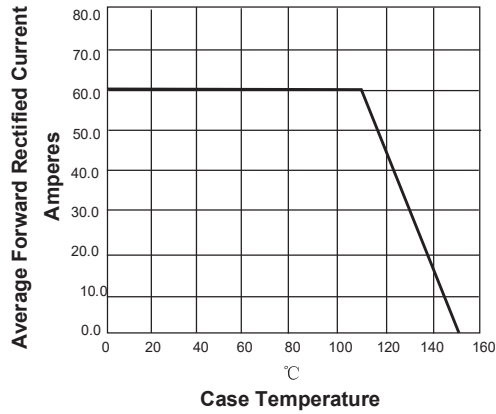


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

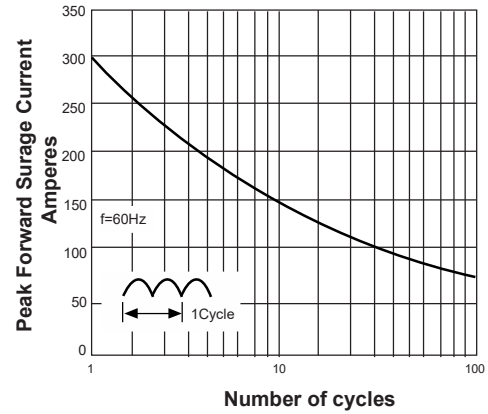


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

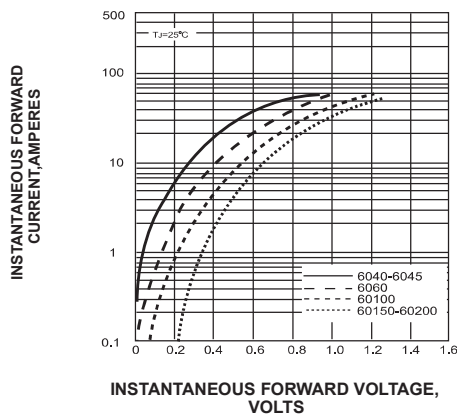
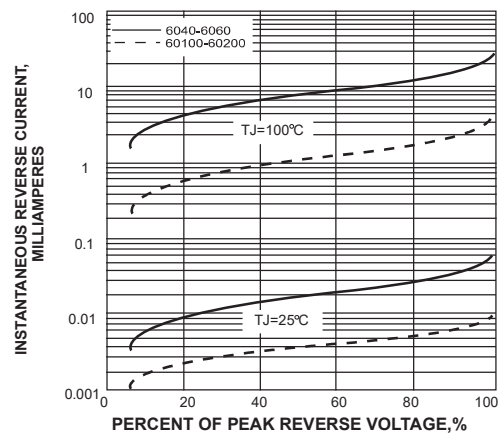


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Package Outline Dimensions Millimeters

