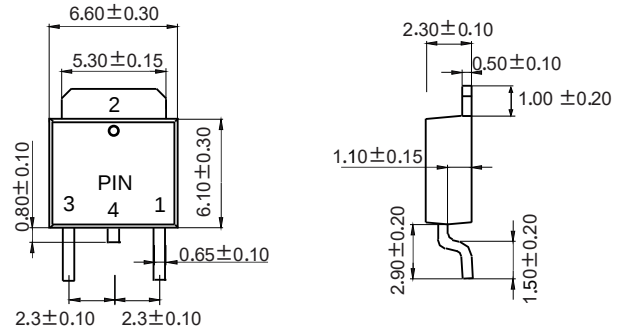


10.0A Schottky Barrier Diode

Feature

- 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

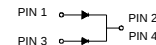
TO-252



Dimensions in millimeters

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%.

Parameter	Symbol	MBR 1020DT	MBR 1040DT	MBR 1045DT	MBR 1060DT	MBR 10100DT	MBR 10150DT	MBR 10200DT	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	20	40	45	60	100	150	200	V
Maximum RMS voltage	V _{RMS}	14	28	31.5	42	70	105	140	V
Maximum DC blocking voltage	V _{DC}	20	40	45	60	100	150	200	V
Maximum average forward rectified current at T _c =100°C per device per diode	I _(AV)	10.0 5.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	125.0							A
Maximum instantaneous forward voltage per diode at 5.0A	V _F	0.70			0.80	0.85	0.95		V
Maximum DC reverse current at rated DC blocking voltage T _A =25°C T _A =100°C	I _R	0.5 50				0.05 10			mA
Typical thermal resistance	R _{qJC}	3.0							°C/W
Operating junction temperature range	T _J	-55 to +125				-55 to +150			°C
Storage temperature range	T _{STG}	-55 to +125				-55 to +150			°C



Ratings and Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

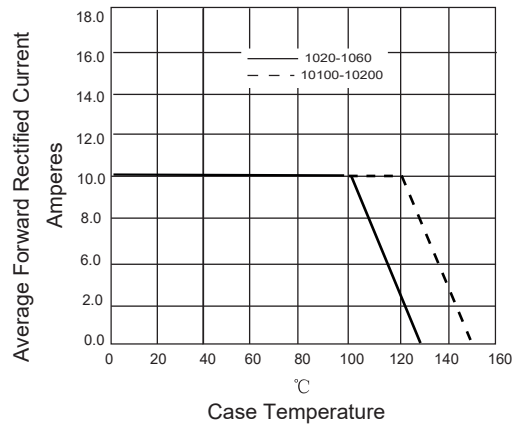


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

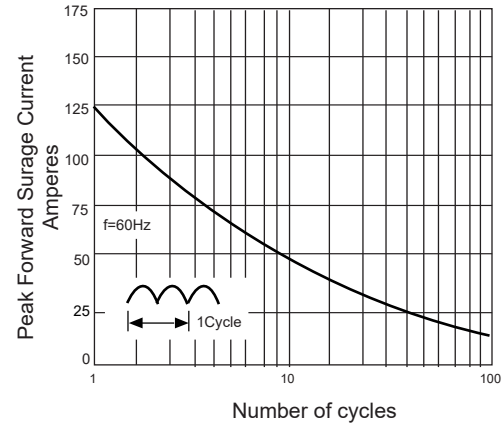


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

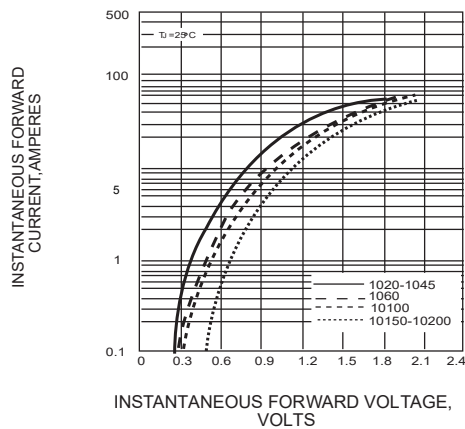


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

