

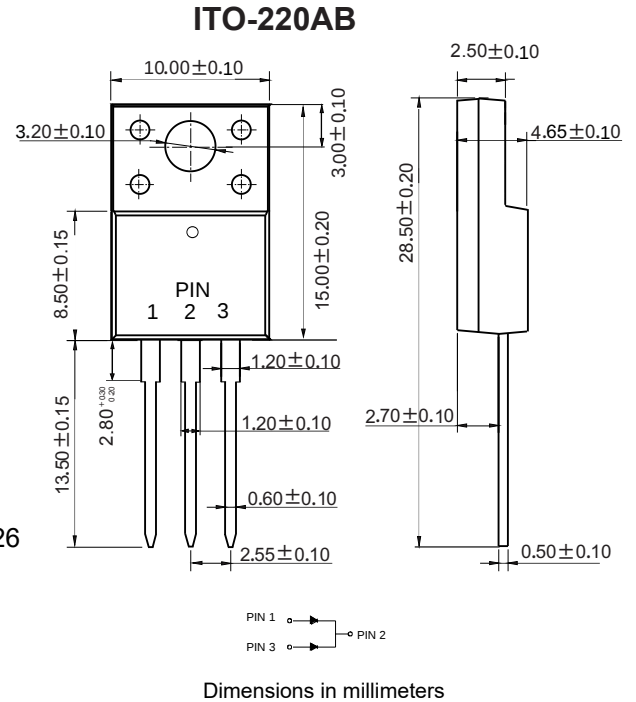
10.0A Schottky Barrier Diode

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 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%.

Parameter	Symbol	MBR 1020FCT	MBR 1040FCT	MBR 1045FCT	MBR 1060FCT	MBR 1065FCT	MBR 10100FCT	MBR 10150FCT	MBR 10200FCT	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	20	40	45	60	65	100	150	200	V
Maximum RMS voltage	V _{RMS}	14	28	31.5	42	45.5	70	105	140	V
Maximum DC blocking voltage	V _{DC}	20	40	45	60	65	100	150	200	V
Maximum average forward rectified current (see fig.1)	I _(AV)	10.0								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	0.3 50					0.1 15			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 +150								°C



Ratings and Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

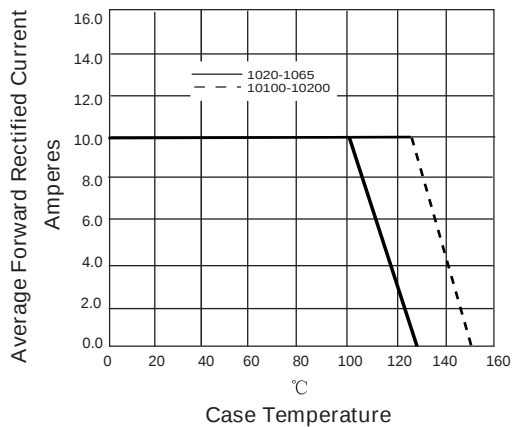


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

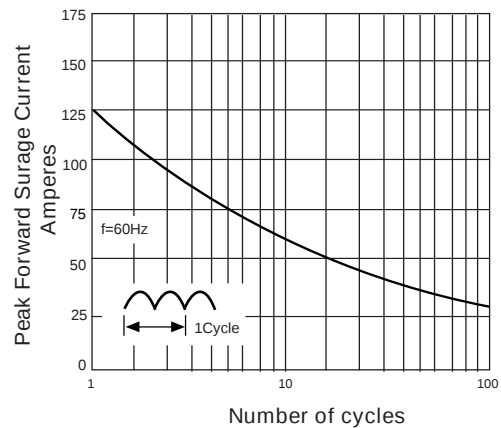


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

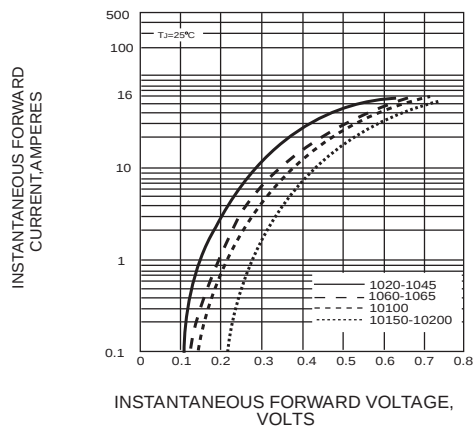
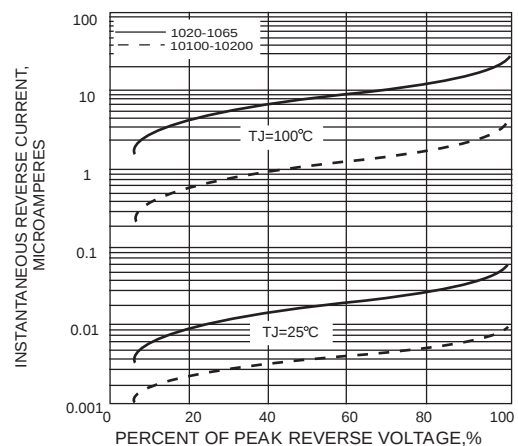


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Ordering Information (Example)

Preferred P/N	Unit Weight(g)	Miniium Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
MBR1020FCT~MBR10200FCT	Approximate 1.36	50	1000	5000	Tube