

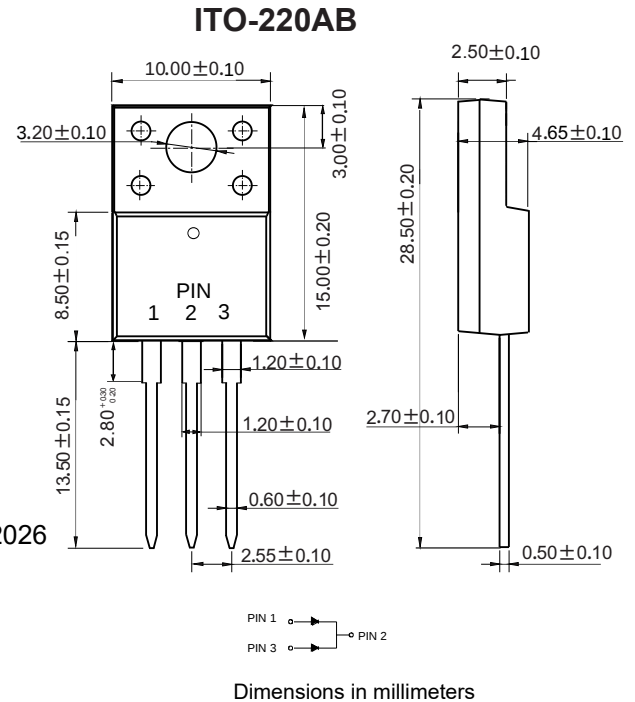
40.0A Schottky Barrier Diode

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

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 4020FCT	MBR 4040FCT	MBR 4045FCT	MBR 4060FCT	MBR 4065FCT	MBR 40100FCT	MBR 40150FCT	MBR 40200FCT	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 at T _c =100°C	I _(AV)	40.0								A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	300.0								A
Maximum instantaneous forward voltage per diode at 20.0A	V _F	0.70			0.80		0.85	0.95		V
Maximum DC reverse current at rated DC blocking voltage	I _R	0.5 50					0.05 15			mA
Typical thermal resistance	R _{qJC}	2.0								°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

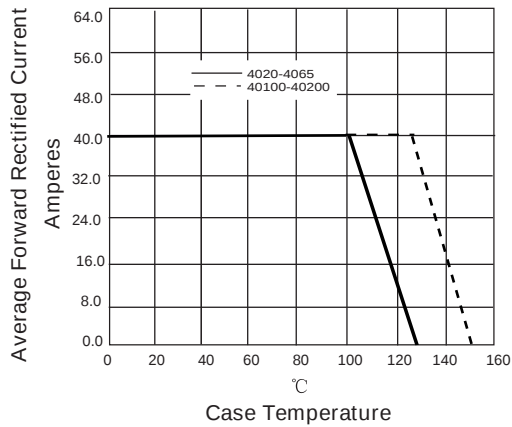


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

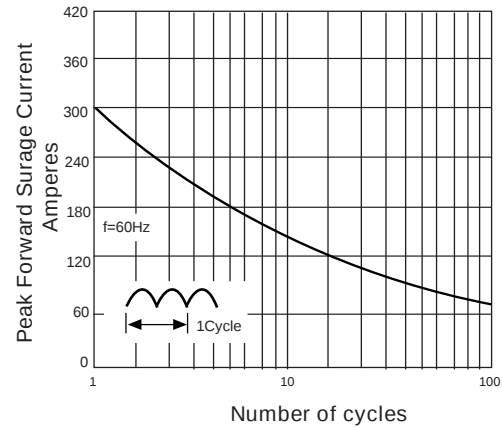


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

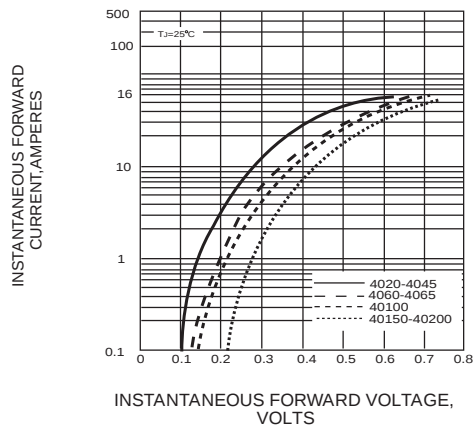
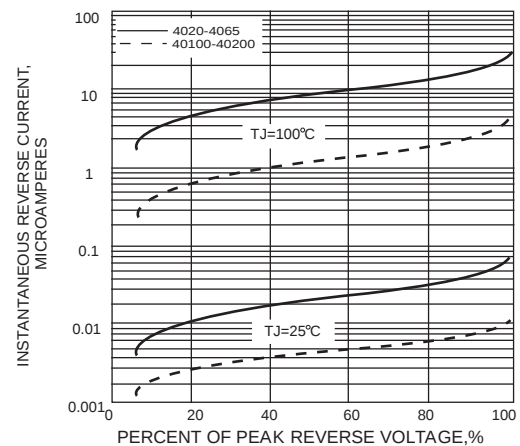


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Ordering Information (Example)

PREFERRED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MBR4020FCT~MBR40200FCT	Approximate 1.69	50	1000	5000	Tube