

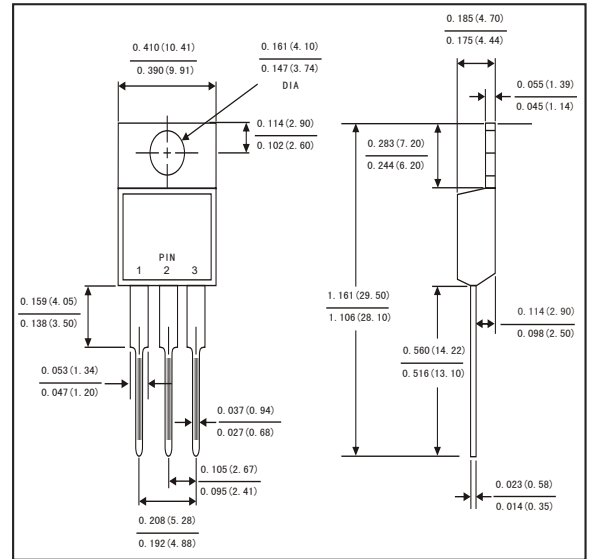
TO-220AB SCHOTTKY BARRIER RECTIFIER

FEATURES

- Metal silicon junction majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss high efficiency
- High current capability
- Low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage high frequency inverters
- free wheeling and polarity protection applications

MECHANICAL DATA

- Case style: TO-220AB molded plastic
- Mounting position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

		Symbols	MBR 4030CT	MBR 4035CT	MBR 4040CT	MBR 4045CT	MBR 4050CT	MBR 4060CT	MBR 40100CT	MBR 40150CT	MBR 40200CT	Units
Maximum repetitive peak reverse voltage		VRRM	30	35	40	45	50	60	100	150	200	Volts
Maximum RMS voltage		VRMS	21	25	28	32	35	42	70	105	140	Volts
Maximum DC blocking voltage		VDC	30	35	40	45	50	60	100	150	200	Volts
Maximum average forward rectified current(see Fig.1)	Per leg	I(AV)	20									Amps
	Total device		40									
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		IFSM	300									Amps
Maximum instantaneous forward voltage at 40A		VF	0.60			0.75		0.85		0.95		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	TC=25°C	IR	0.2									mA
	TC=125°C		30			50						
Typical thermal resistance (Note 2)		R _{θJC}	3.0									°C/W
Operating junction temperature range		T _J	-65 to +150									°C
Storage temperature range		T _{STG}	-65 to +150									°C

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

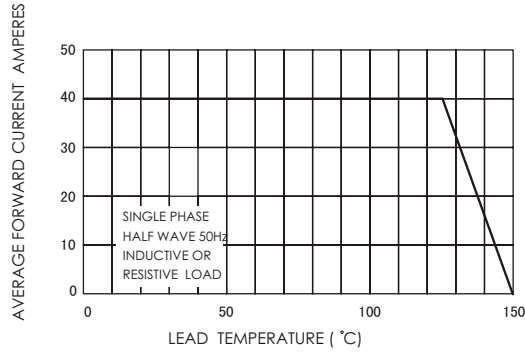


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

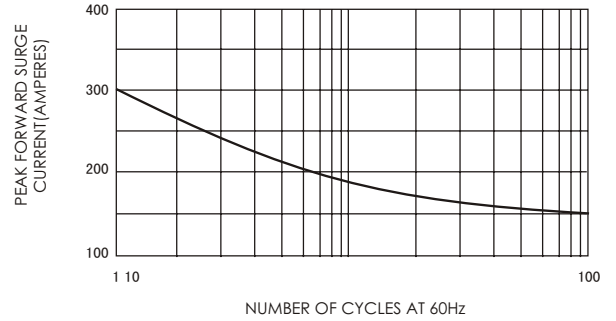


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

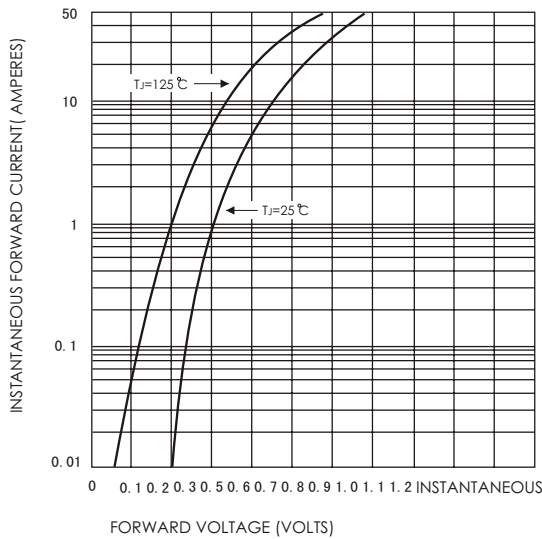


FIG.4-TYPICAL REVERSE CHARACTERISTICS

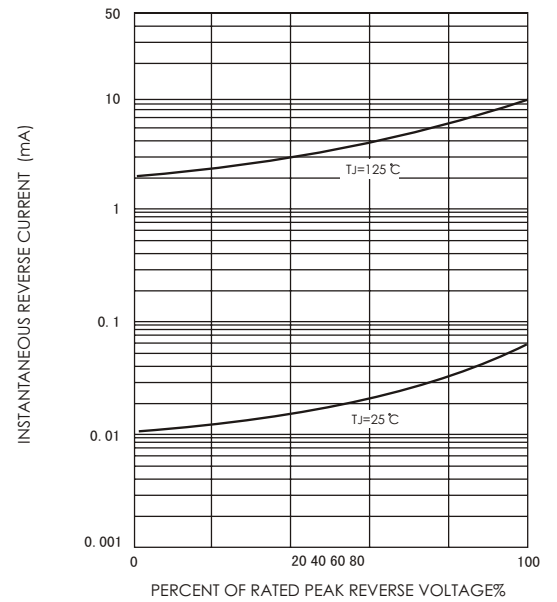


FIG.5-TYPICAL JUNCTION CAPACITANCE

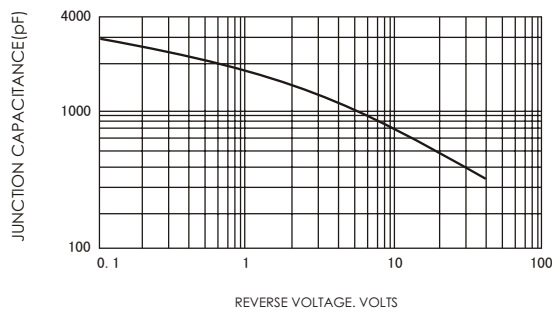


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

