

SCHOTTKY BARRIER RECTIFIER

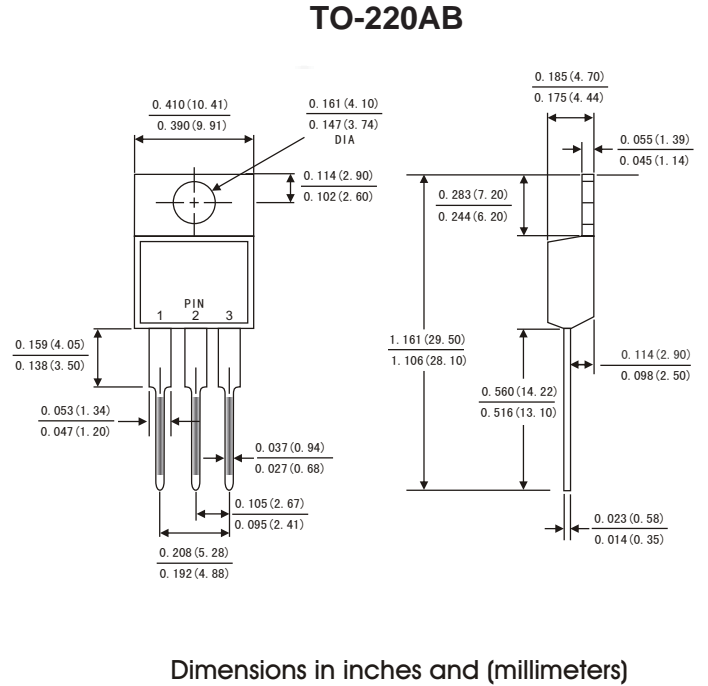
VOLTAGE RANGE: 20--- 200 V CURRENT: 20.0 A

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260 °C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- Case: TO-220AB molded plastic body
- Terminals:Lead solderable per MIL-STD-750,method 2026
- Polarity:Color band denotes cathode end



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate by 20%.

TYPE NUMBER	SYMBOL	MBR	MBR	MBR	MBR	MBR	MBR	MBR	MBR	UNITS
		2020CT	2030CT	2040CT	2050CT	2060CT	2080CT	20100CT	20200CT	
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	200	V
Maximum RMS voltage	V_{RMS}	14	21	31	35	42	56	70	140	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	200	V
Maximum Average Forward rectified Current 0.375"(9.5mm) lead length	$I_{F(AV)}$	10.0 20.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	200.0								A
Maximum instantaneous forward voltage at 20.0 A (Note 1)	V_F	0.60		0.75		0.85		0.95		V
Maximum reverse current at rated DC blocking voltage per diode	@ $T_A=25^\circ C$	0.2								mA
	@ $T_A=120^\circ C$	30			50					
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	3.0								°C/W
Storage Temperature	T_{STG}	- 65 ---- + 150								°C
Operation Junction Temperature	T_j	- 65 ---- + 125								°C

NOTE:1. Pulse test:300µs pulse width,1% duty cycle.

2.Thermal resistance from junction to case.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

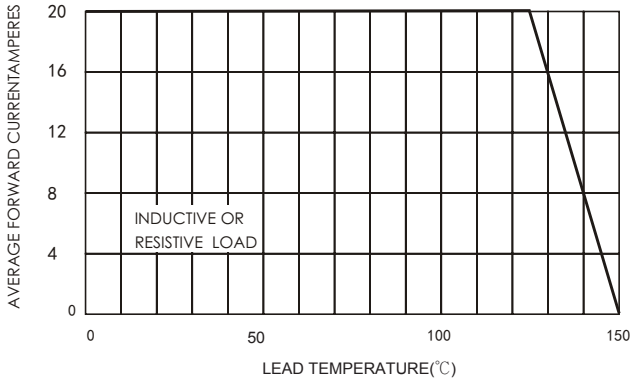


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

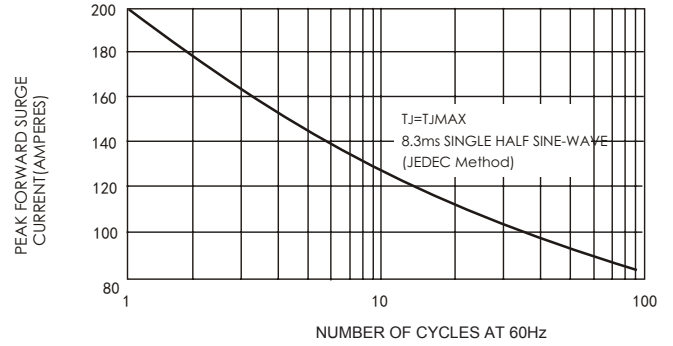


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

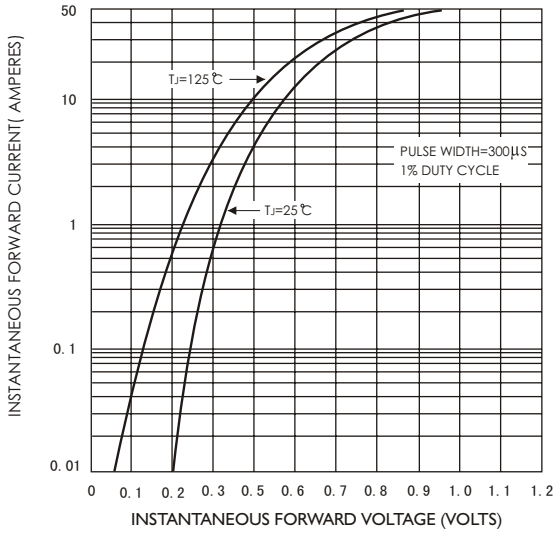


FIG.4 -TYPICAL REVERSE CHARACTERISTICS

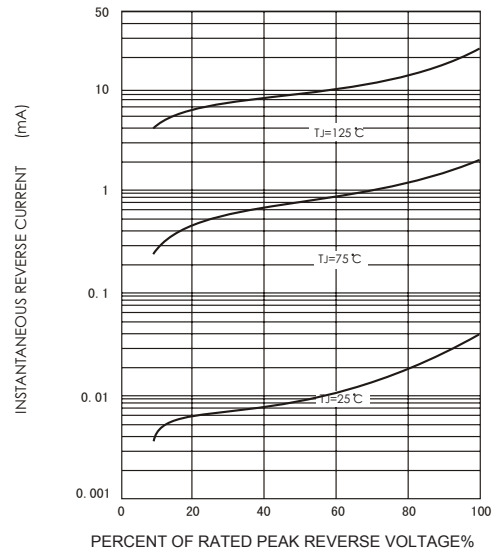


FIG.5-TYPICAL JUNCTION CAPACITANCE

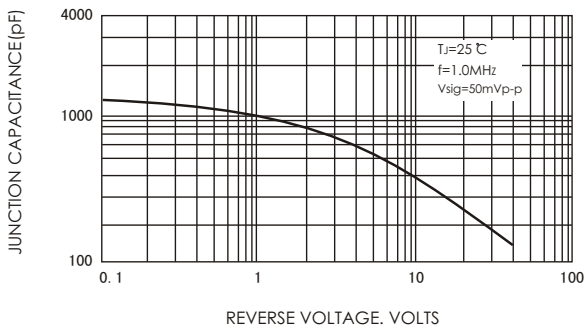


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

