

SCHOTTKY BARRIER RECTIFIER

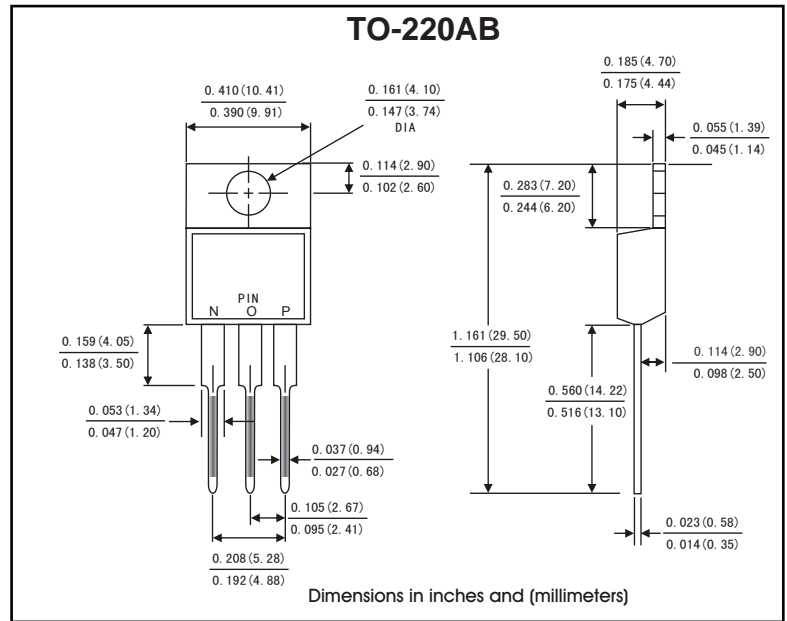
VOLTAGE RANGE: 20--- 150 V CURRENT: 30.0 A

FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- Low Power Loss,High Efficiency
- Epoxy:UL 94v-0 rate flame retardant

MECHANICAL DATA

- Case: TO-220AB molded plastic body
- Terminals:Lead solderable per MIL-STD-750,method 2026



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	UNI
		3020CT	3030CT	3040CT	3045CT	3060CT	3080CT	30100CT	30150CT	TS
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	45	60	80	100	150	V
Maximum RMS voltage	V_{RMS}	14	21	28	32	42	56	70	105	V
Maximum DC blocking voltage	V_{DC}	20	30	40	45	60	80	100	150	V
Maximum Average Forward rectified Current @TC = 130°C	$I_{F(AV)}$	15.0 30.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	250.0								A
Maximum forward Voltage (IF=15A, TC=25°C)	V_F	0.60			0.75		0.85		0.95	V
Maximum reverse current at rated DC blocking voltage (Note1)	@T _A =25°C	0.2								mA
	@T _A =125°C	30				50				
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	3.0								°C/W
Storage Temperature	T _{STG}	- 65 ---- + 150								°C
Operation Junction Temperature	T _j	- 65 ---- + 150								°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

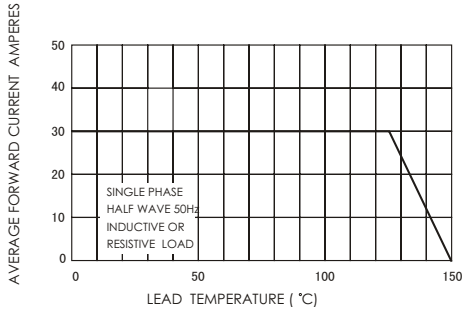


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER DIODE

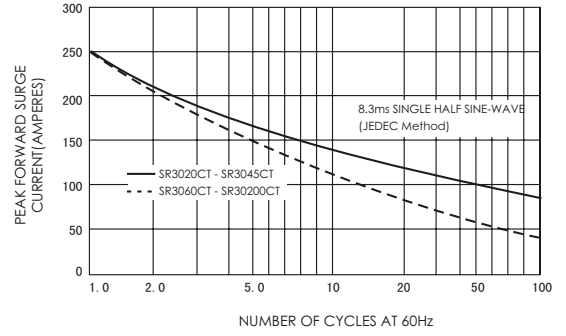


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

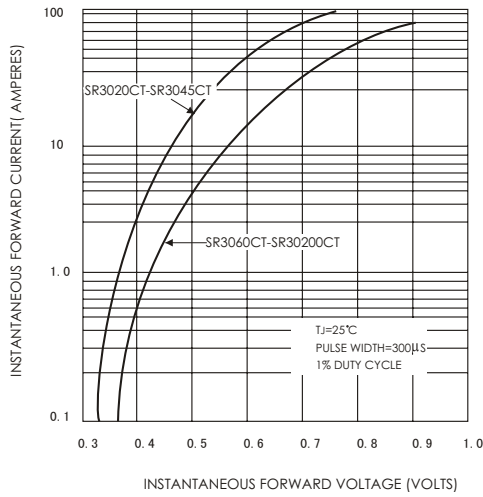


FIG.4-TYPICAL REVERSE CHARACTERISTICS

