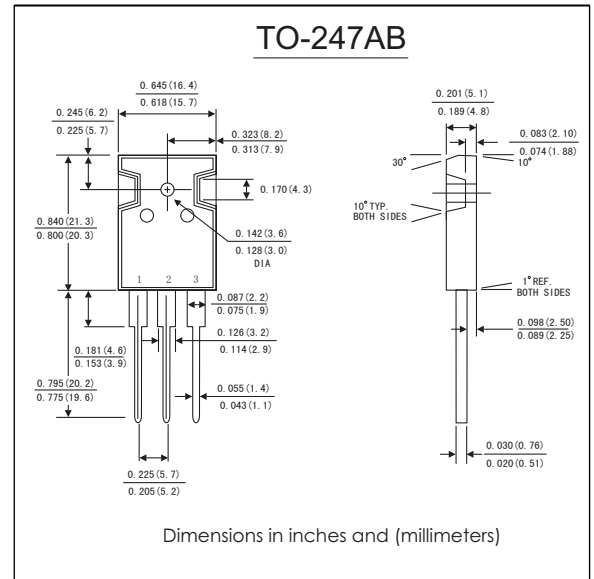


SCHOTTKY BARRIER RECTIFIER

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
- Single rectifier construction
- 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, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/EU



MECHANICAL DATA

- Case: TO-247AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position:Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- (Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

	Symbols	SR 4020PT	SR 4030PT	SR 4040PT	SR 4045PT	SR 4050PT	SR 4060PT	SR 40100PT	SR 40150PT	SR 40200PT	Units
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	45	50	60	100	150	200	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	32	35	42	70	105	140	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	45	50	60	100	150	200	Volts
Maximum average forward rectified current(see Fig.1)	Per leg	20.0									Amps
	Total device	40.0									
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	300.0									Amps
Maximum instantaneous forward voltage at 40.0 A	V _F	0.60			0.75		0.85	0.95			Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _A =25°C	0.1									mA
	T _A =125°C	30			50						
Typical thermal resistance (Note 2)	R _{θJC}	3.0									°C/W
Operating junction temperature range Storage	T _J	-55 to+150									°C
temperature range	T _{STG}	-55 to+150									°C

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

2. Thermal resistance from junction to case

SCHOTTKY BARRIER RECTIFIER

RATINGS AND CHARACTERISTIC CURVES SR4020PT - SR40200PT

FIG.1-FORWARD CURRENT DERATING CURVE

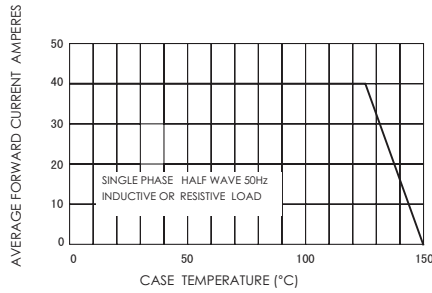


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

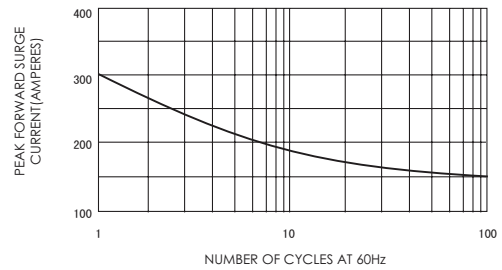


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

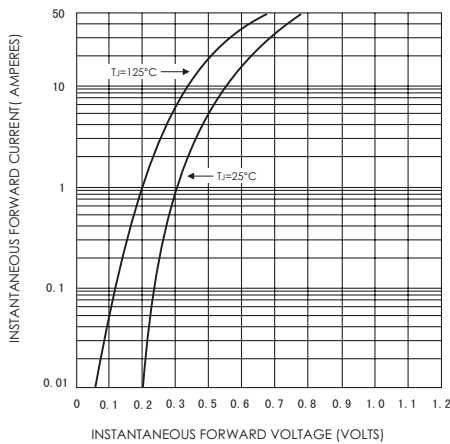


FIG.4-TYPICAL REVERSE CHARACTERISTICS

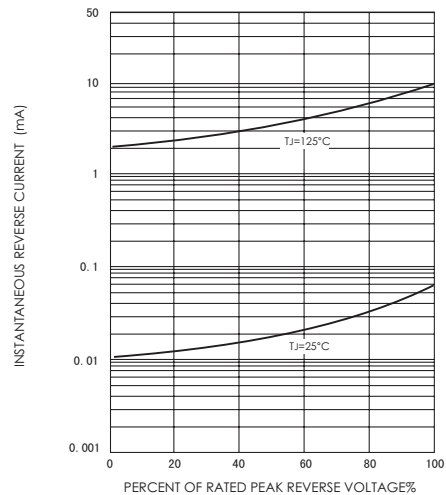


FIG.5-TYPICAL JUNCTION CAPACITANCE

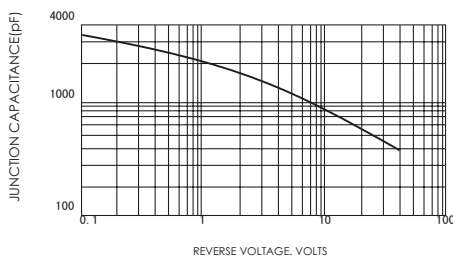
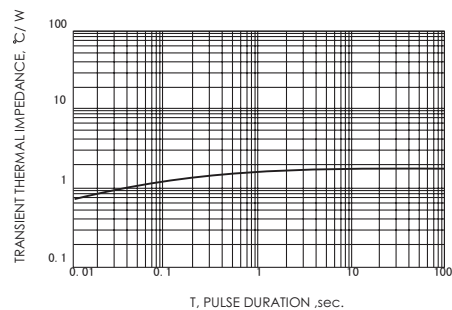


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.