



SCHOTTKY BARRIER RECTIFIER

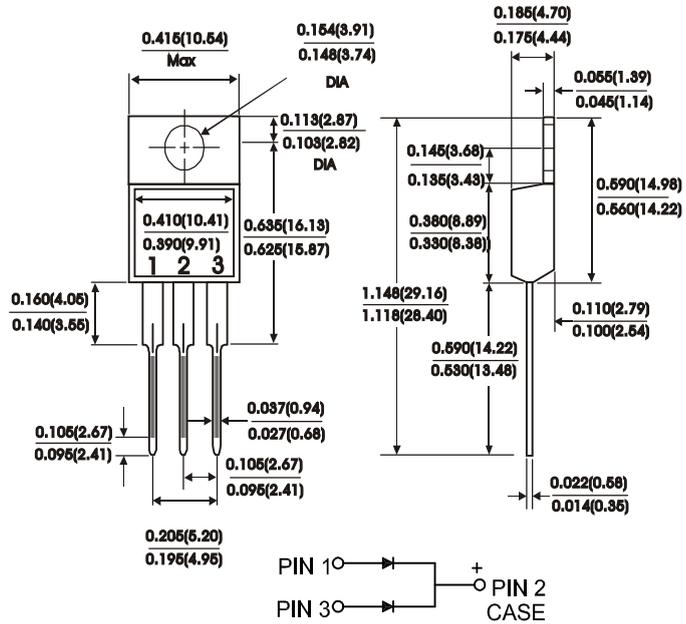
TO-220 AB

FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Metal silicon junction Majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High temperature soldering guaranteed: 250°C/10 seconds, 0.25"(6.35mm) from case

MECHANICAL DATA

Case : JEDEC TO-220AB molded plastic
 Terminals : Leads solderable per MIL-STD-750 Method 2026
 Polarity : As marked
 Mounting Position : Any
 Mounting Torque 5 In - lbs.max
 Weight : 0.08 ounce, 2.24 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
 Single phase half wave, 60 Hz resistive or inductive load.
 For capacitive load, derate current by 20%.

Characteristic	Symbol	SR10120CT	Units
Maximum recurrent peak reverse voltage	V_{RRM}	120	Volts
Maximum RMS voltage	V_{RMS}	85	Volts
Maximum DC blocking voltage	V_{DC}	120	Volts
Maximum average forward rectified current at $T_c=90^\circ\text{C}$ (Per Pak)	$I_{(AV)}$	10	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)	I_{FSM}	80	Amps
Maximum instantaneous forward voltage (Per leg)(NOTE 2)	$I_F=5A$ V_F	0.90	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Per leg)(NOTE 2)	$T_c=25^\circ\text{C}$ $T_c=125^\circ\text{C}$ I_R	0.5 35.0	mA
Typical thermal resistance(Per leg)(NOTE 1)	R_{th-JC}	5.0	°C/W
Operating temperature range	T_J	-65to+150	°C
Storage temperature range	T_{Stg}	-65to+150	°C

NOTES:

- (1) Thermal resistance from junction to case
- (2) Pulse test : 300 us pulse width, 1 % duty cycle
- (3) Marking : $\frac{SR10120CT}{Symbol \quad Marking} = \frac{SR10120}{Marking}$ (Without Marking "CT")



RATINGS AND CHARACTERISTIC CURVES

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

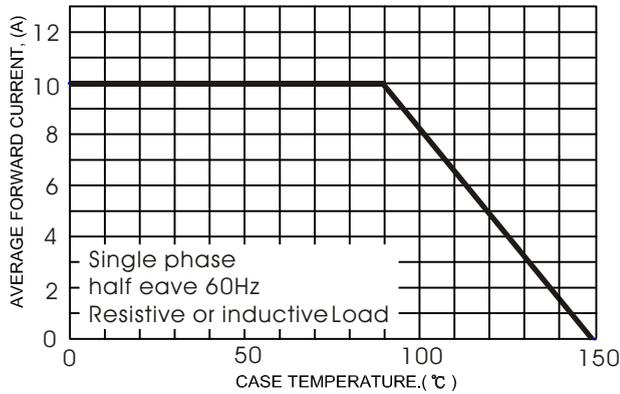


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

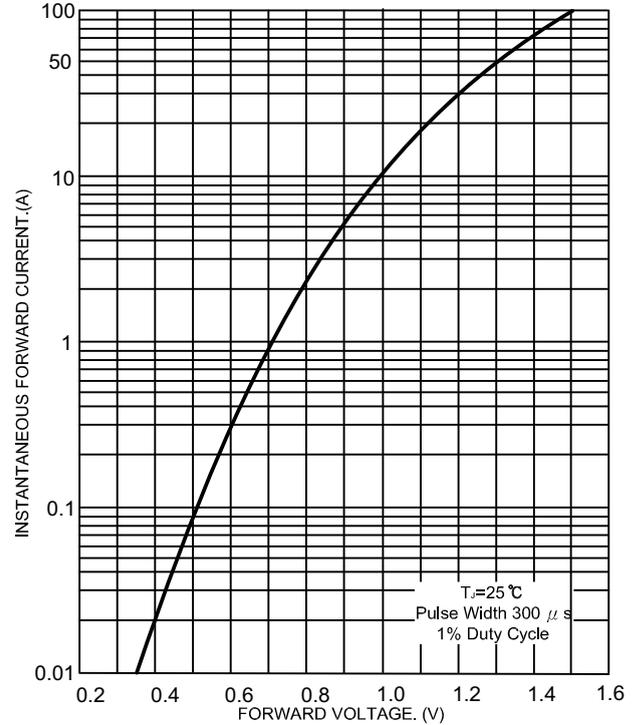


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

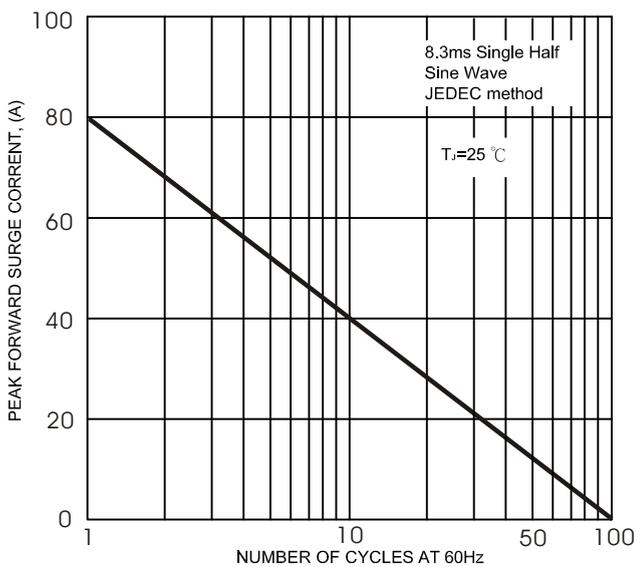


FIG.5- TYPICAL REVERSE CHARACTERISTICS

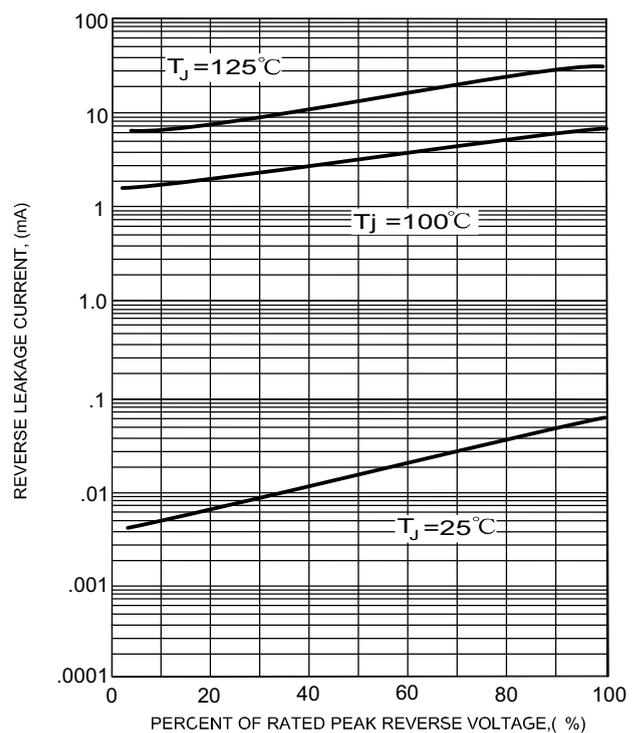
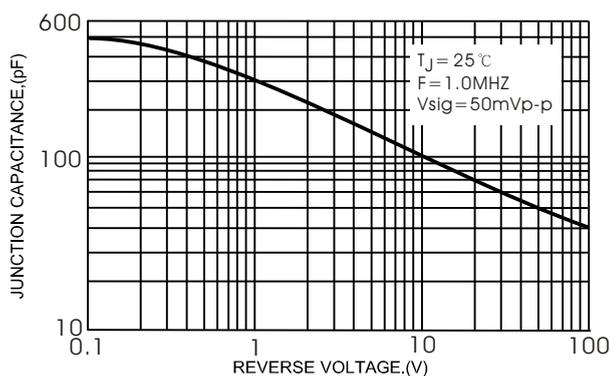


FIG.4- TYPICAL JUNCTION CAPACITANCE





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