



SCHOTTKY BARRIER RECTIFIER

TO-220 AB

FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive centertap
- 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

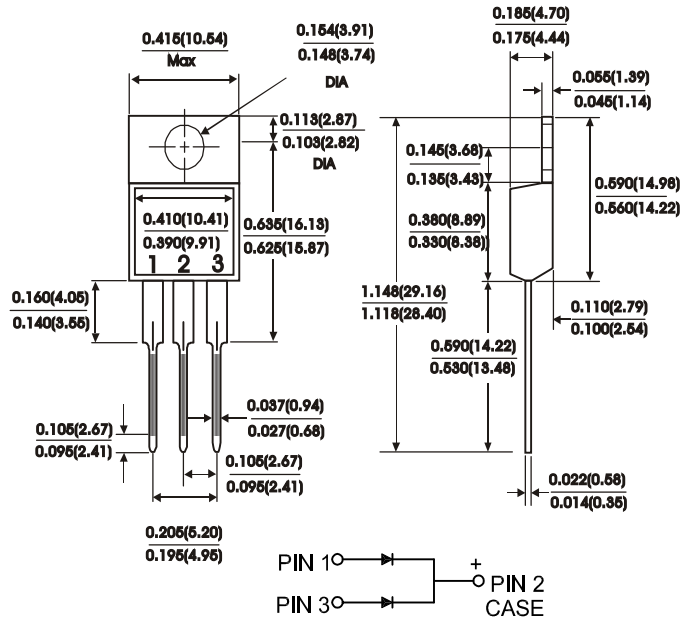
Terminals : Leads solderable per MIL-STD-750 Method 2026

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	SR20120CT	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 $T_C=100^\circ C$ (Per Pak)	$I_{(AV)}$	20	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)	I_{FSM}	150	Amps
Maximum instantaneous forward voltage (Per leg)(NOTE 2) $I_F=10A$	V_F	0.90	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Per leg)(NOTE 2) $T_C=25^\circ C$ $T_C=125^\circ C$	I_R	1.5 50	mA
Typical thermal resistance(Per leg)(NOTE 1)	R_{th-JC}	4.0	$^\circ C/W$
Operating temperature range	T_J	-65to+125	$^\circ C$
Storage temperature range	T_{Stg}	-65to+150	$^\circ C$

NOTES:

(1) Thermal resistance from junction to case

(2) Pulse test : 300 us pulse width, 1% duty cycle

(3) Marking : SR20120CT = SR20120 (Without Marking "CT")

Symbol Marking



RATINGS AND CHARACTERISTIC CURVES

FIG.1 - TYPICAL FORWARD CORRENT DERATING CURVE

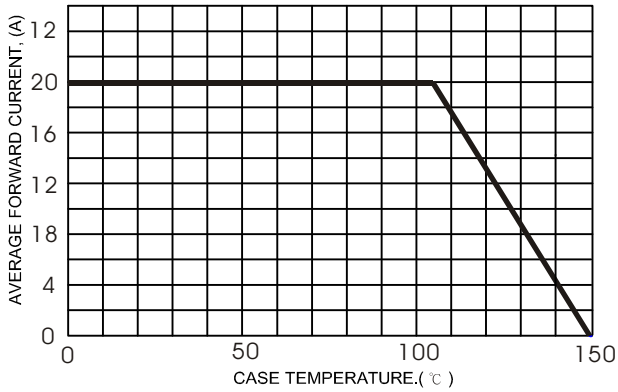


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

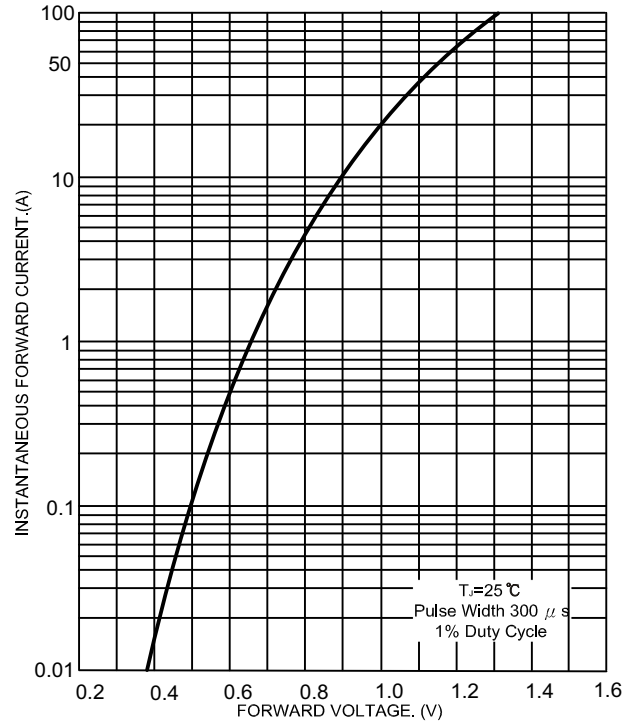


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

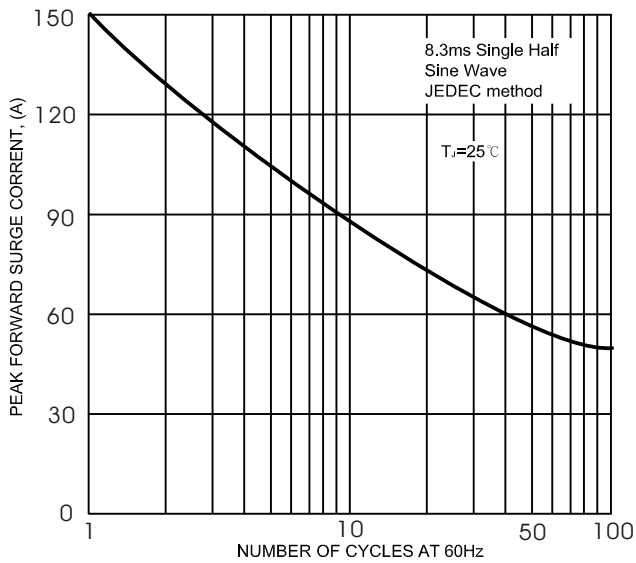
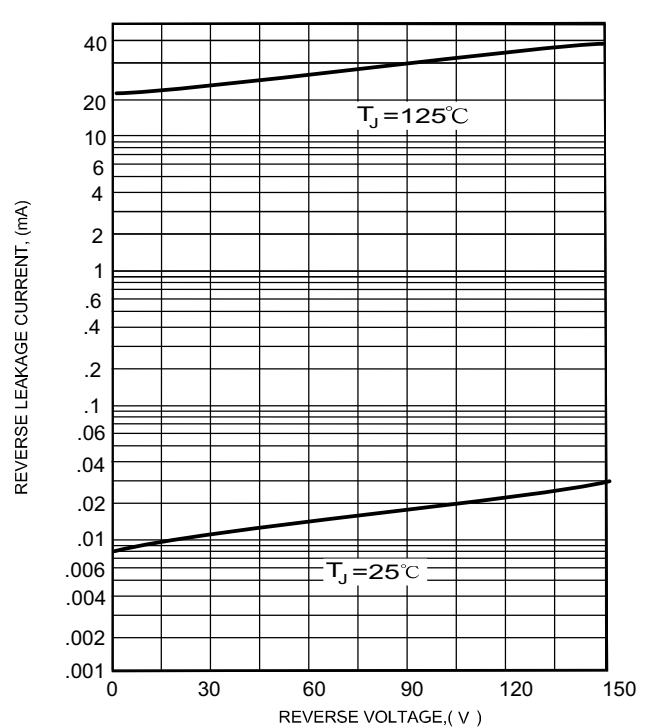
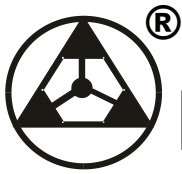


FIG.4- TYPICAL REVERSE CHARACTERISTICS





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