



SCHOTTKY BARRIER RECTIFIERS

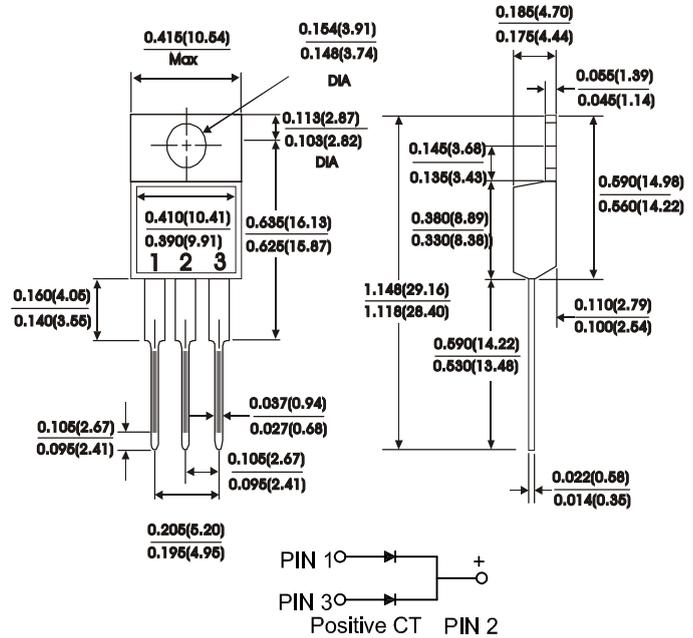
TO-220 AB

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	SR 3020CT	SR 3030CT	SR 3035CT	SR 3040CT	SR 3045CT	SR 3050CT	SR 3060CT	Units
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	35	40	45	50	60	Volts
Maximum RMS voltage	V_{RMS}	14	21	25	28	32	35	42	Volts
Maximum DC blocking voltage	V_{DC}	20	30	35	40	45	50	60	Volts
Maximum average forward rectified current at See fig. 1	I_O	30							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)	I_{FSM}	200							Amps
Maximum instantaneous forward voltage (Per leg)(NOTE 2) $I_F = 15A$	V_F	0.65					0.80		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					1.0	60		mA
Typical thermal resistance (Per leg)(NOTE 1)	R_{th-JC}					1.5			°C/W
Operating temperature range	T_J	-65to+150							°C
Storage temperature range	T_{Stg}	-65to+175							°C

NOTES:

- (1) Thermal resistance from junction to case
- (2) Pulse test : 300 us pulse width, 1% duty cycle
- (3) Marking : SR3020CT = SR3020 (Without Marking "CT")
 Symbol Marking



RATINGS AND CHARACTERISTIC CURVES

FIG.1 - TYPICAL FORWARD CORRENT DERATING CURVE

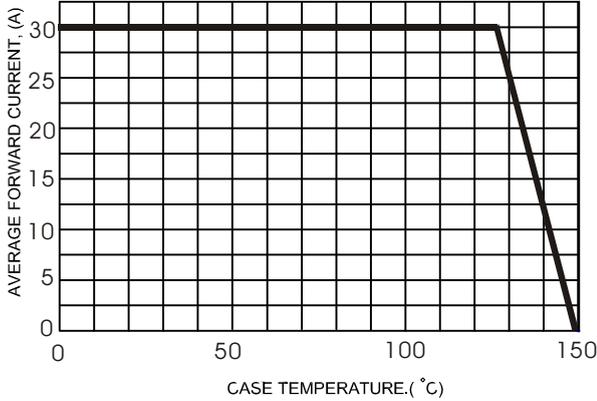


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

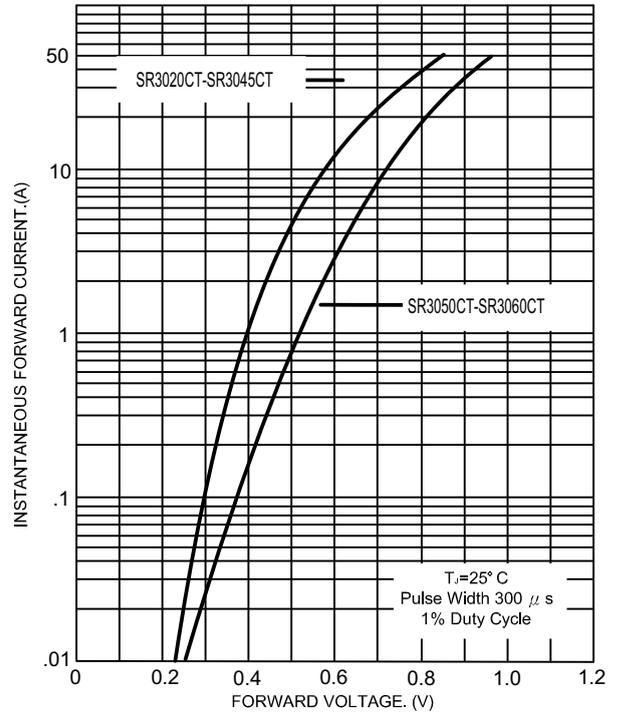


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

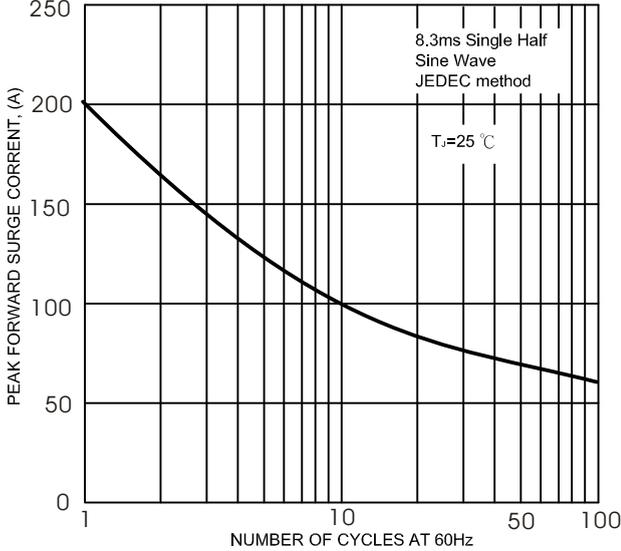


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

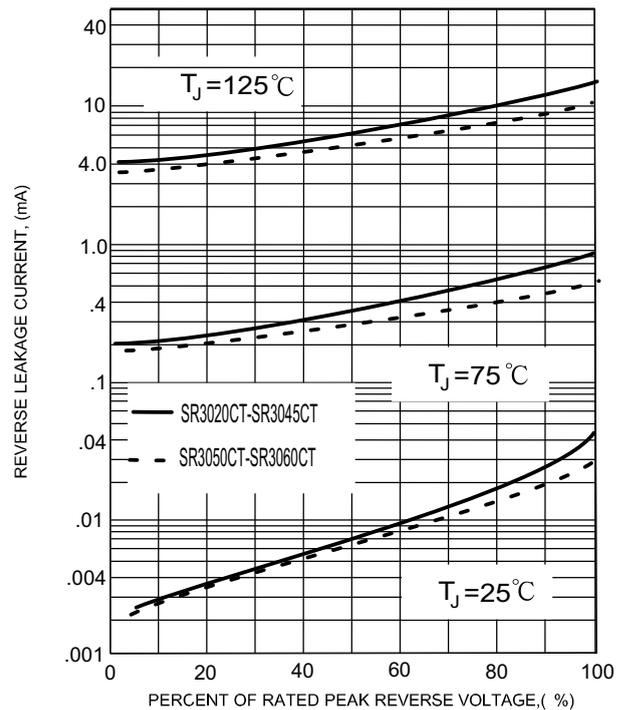
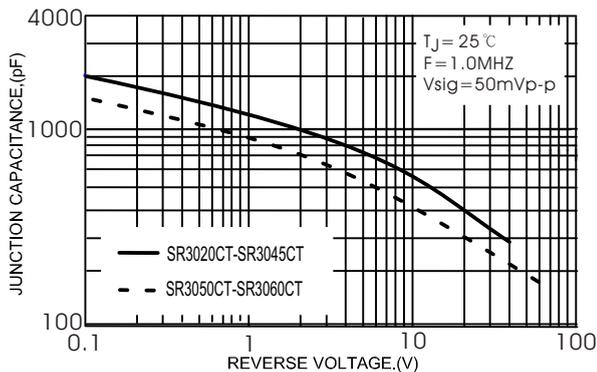


FIG.4- TYPICAL JUNCTION CAPACITANCE





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