



SCHOTTKY BARRIER RECTIFIERS

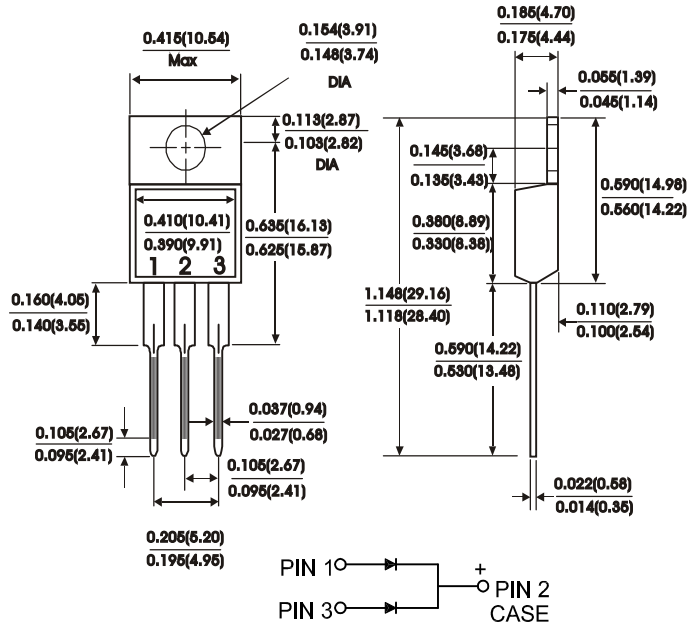
TO-220 AB

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	SR 1020CT	SR 1030CT	SR 1035CT	SR 1040CT	SR 1045CT	SR 1050CT	SR 1060CT	Units
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	20	30	35	40	45	50	60	Volts
Maximum RMS voltage	V <sub>RMS</sub>	14	21	25	28	32	35	42	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	35	40	45	50	60	Volts
Maximum average forward rectified current at T <sub>c</sub> = 125 °C	I <sub>(AV)</sub>	10							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)	I <sub>FSM</sub>	120							Amps
Maximum instantaneous forward voltage (Per leg)(NOTE 2) I <sub>F</sub> = 5.0A	V <sub>F</sub>	0.65					0.75		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Per leg)(NOTE 2) T <sub>c</sub> = 25 °C T <sub>c</sub> = 125 °C	I <sub>R</sub>	0.5					50.0		mA
Typical thermal resistance (Per leg)(NOTE 1)	R <sub>th-JC</sub>	3.0					°C/W		
Operating temperature range	T <sub>J</sub>	-65to+150							°C
Storage temperature range	T <sub>stg</sub>	-65to+175							°C

NOTES:  
 (1) Thermal resistance from junction to case  
 (2) Pulse test : 300 us pulse width, 1% duty cycle  
 (3) Marking : SR1020CT = SR1020 (Without Marking "CT")  
 Symbol Marking



RATINGS AND CHARACTERISTIC CURVES

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

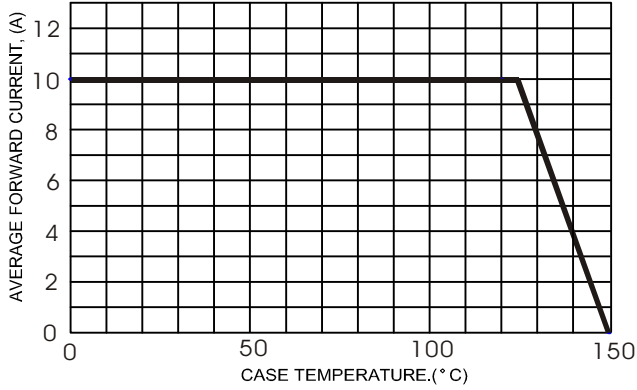


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

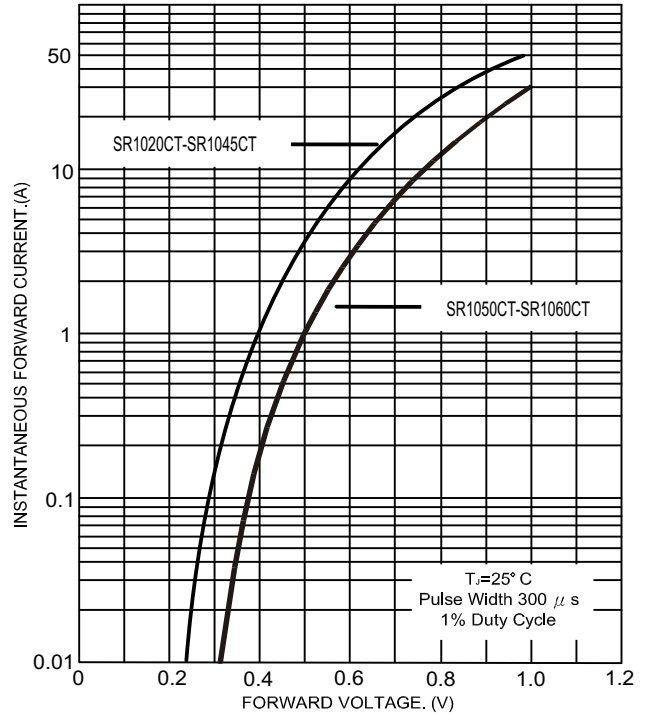


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

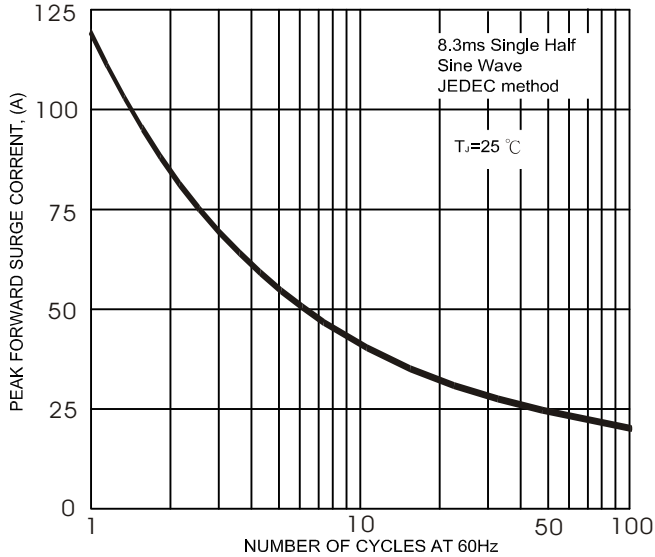


FIG.5- TYPICAL REVERSE CHARACTERISTICS

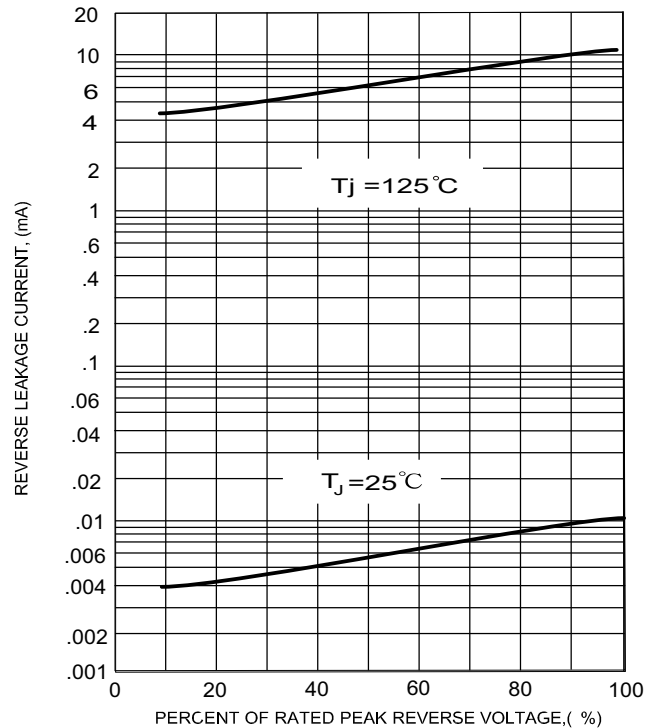
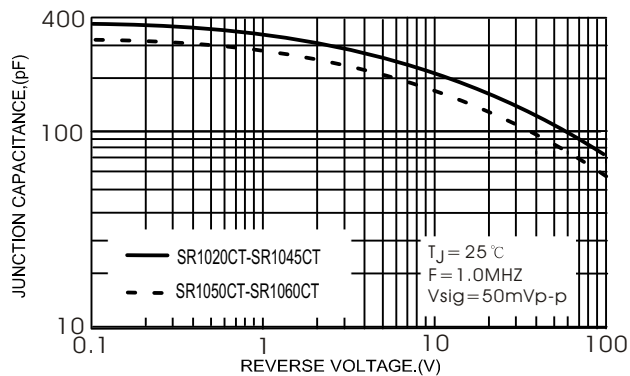


FIG.4- TYPICAL JUNCTION CAPACITANCE





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