



# SCHOTTKY BARRIER RECTIFIERS

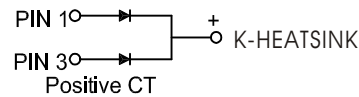
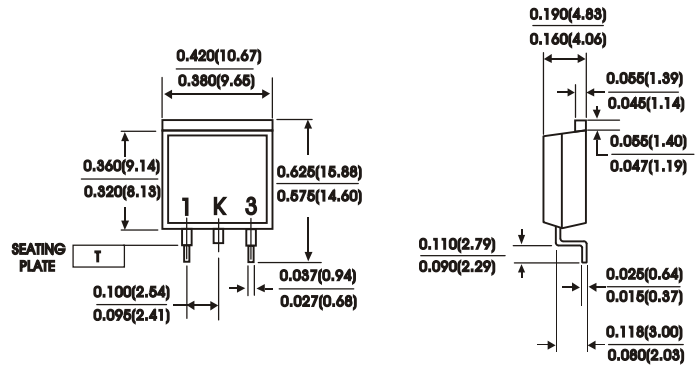
## TO-263AB

### 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

### MECHANICAL DATA

- Case : JEDEC TO-263AB 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	SRB 3020CT	SRB 3030CT	SRB 3035CT	SRB 3040CT	SRB 3045CT	SRB 3050CT	SRB 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	$I_{(AV)}$	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) $T_c = 25\text{ }^\circ\text{C}$ $T_c = 125\text{ }^\circ\text{C}$	$I_R$					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 CURRENT DERATING CURVE

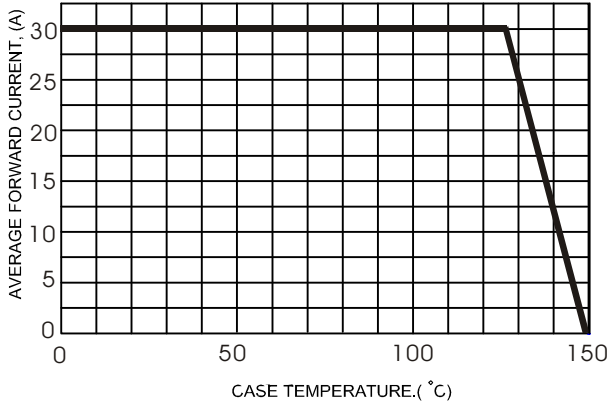


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

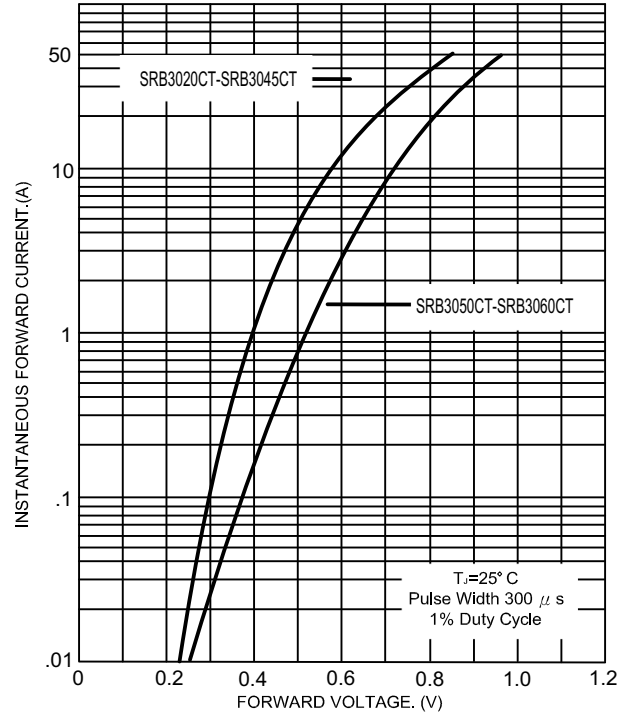


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

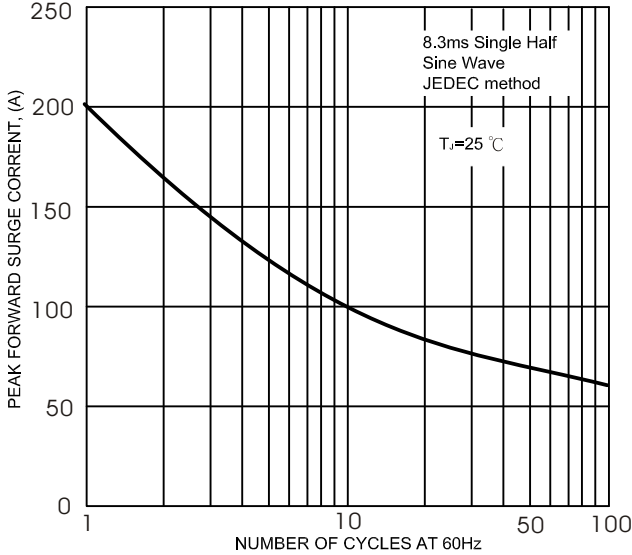


FIG.5- TYPICAL REVERSE CHARACTERISTICS

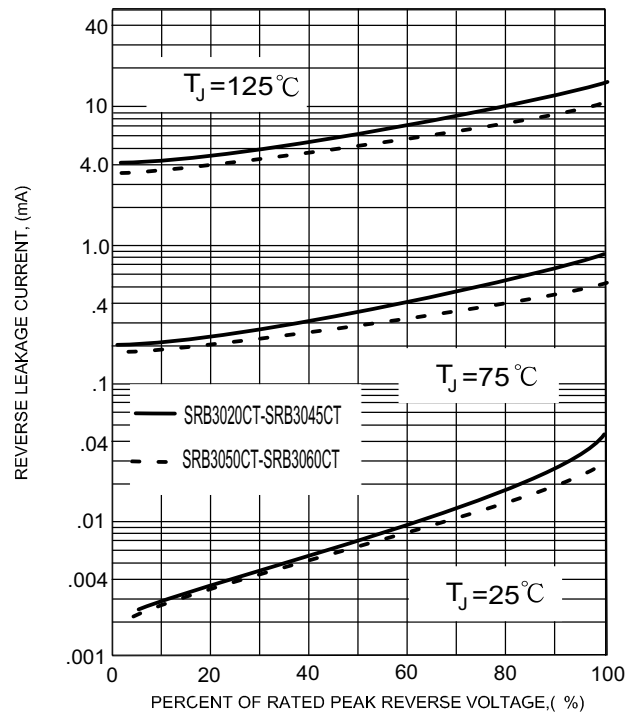
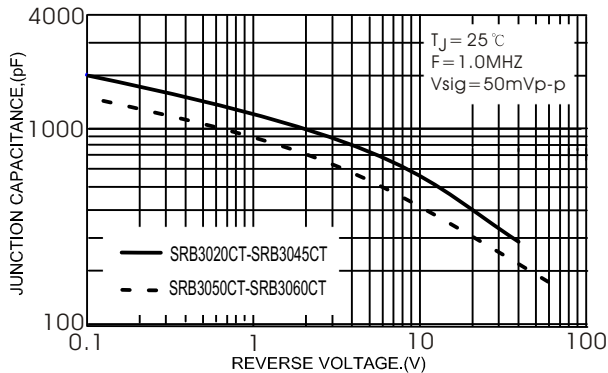


FIG.4- TYPICAL JUNCTION CAPACITANCE





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