



## SCHTTKY BARRIER RECTIFIER

SRB3020C THRU SRB30100C

VOLTAGE RANGE

20 to 100 Volts

CURRENT

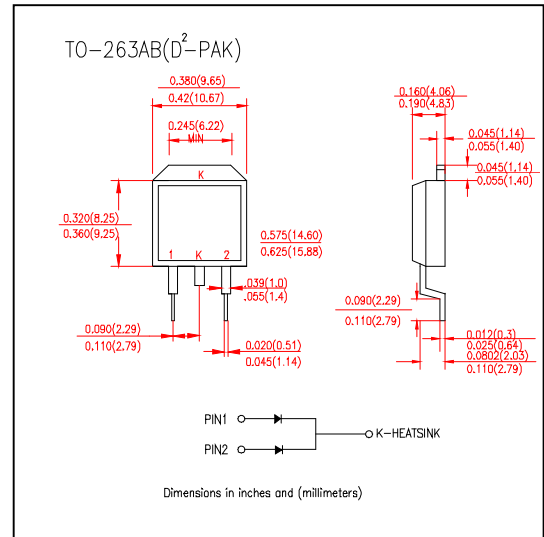
30.0 Ampere

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss,high efficiency
- Low forward voltage,high current capability
- High surge capacity
- For use in low voltage, high frequency inverters
- Free wheeling, and polarity protection applications

### MECHANICAL DATA

- Case: D<sup>2</sup>-PAK/TO-263AB Molded Plastic
- Terminals: Lead solderable per MIL-STD-202, Method 208
- Polarity: as marked
- Mounting position: Any
- Weight: 0.06ounce, 1.7grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	SRB 3020C	SRB 3030C	SRB 3035C	SRB 3040C	SRB 3045C	SRB 3050C	SRB 3060C	SRB 3080C	SRB 30100C	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	35	40	45	50	60	80	100	Volts
Maximum RMS Voltage	$V_{RMS}$	14	21	25	28	32	35	42	56	70	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	35	40	45	50	60	80	100	Volts
Maximum Average Forward Rectified Current at $T_c=90^\circ\text{C}$	$I_{(AV)}$	30.0									Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	$I_{FSM}$	200									Amps
Maximum Forward Voltage per at15.0A per element	$V_F$	0.65	0.72		0.75		0.85			Volts	
Maximum DC Reverse Current at rated DC Blocking Voltage per element	$I_R$	$T_c = 25^\circ\text{C}$	1.0								mA
		$T_c = 100^\circ\text{C}$	100								
Typical Junction Capacitance(Note2)	$C_J$	500									pF
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	2.0									$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_J T_{STG}$	(-55 to +150)									$^\circ\text{C}$

#### Notes:

1. Thermal Resistance Junction to CASE
2. Measured at  $V_R=4\text{v}$  and  $f=1\text{MHz}$



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## RATING AND CHARACTERISTIC CURVES SRB3020C THRU SRB30100C

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

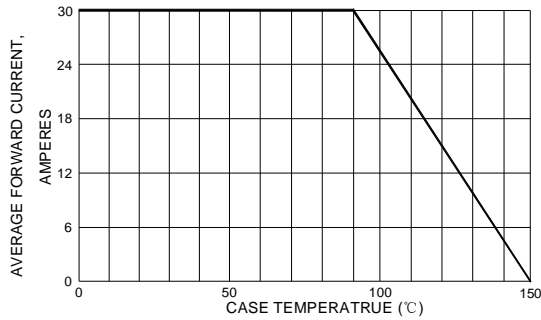


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

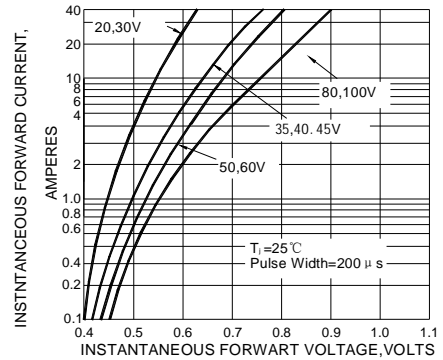


FIG.2-TYPICAL REVERSE CHARACTERISTICS

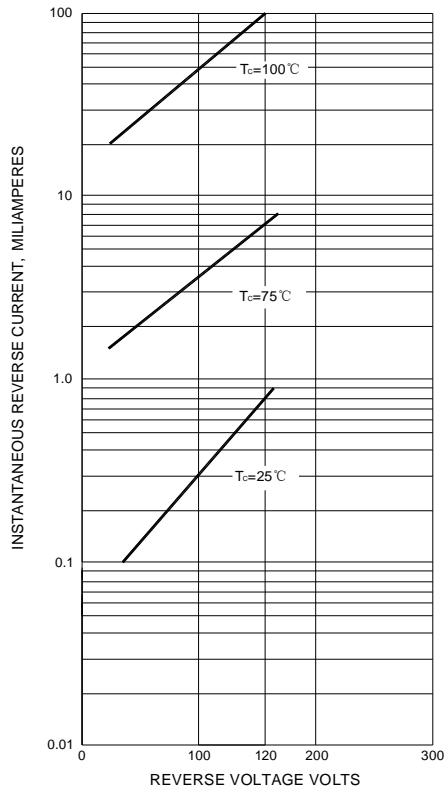


FIG.4-MAXIMUM NON-REPETITIVE SURGE CURRENT

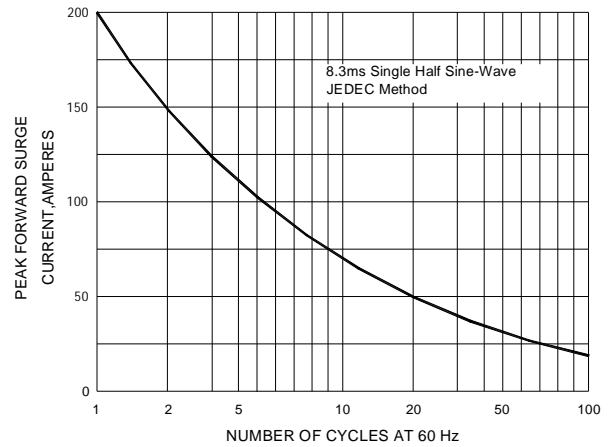


FIG.5-TYPICAL JUNCTION CAPACITANCE

