



SCHOTTKY BARRIER RECTIFIER

SR820 THRU SR8100

VOLTAGE RANGE

20 to 100 Volts

CURRENT

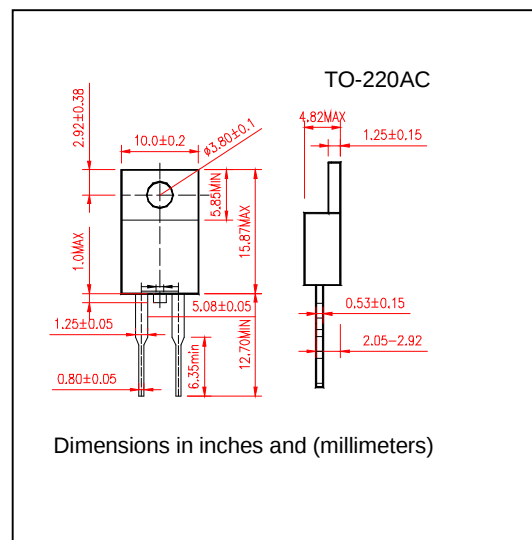
8.0 Amperes

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: TO-220AC molded plastic
- Terminals: Lead solderable per MIL-STD-202, Method 208
- Polarity: position: Any
- Weight: 0.08ounce, 2.24 grams



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	SR 820	SR 830	SR 835	SR 840	SR 845	SR 850	SR 860	SR 880	SR 8100	SR 8150	SR 8200	UNIT
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	20	30	35	40	45	50	60	80	100	150	200	Volts
Maximum RMS Voltage		V _{RMS}	14	21	25	28	32	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage		V _{DC}	20	30	35	40	45	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current At T _C =100°C		I _(AV)	8.0											Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)		I _{FSM}	150											Amps
Maximum Forward Voltage at 8.0A per element		V _F	0.65					0.75		0.85				Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element	T _C = 25°C	I _R	0.5											μA
	T _C = 100°C		50											
Typical Junction Capacitance (Note 2)		C _J	400											pF
Typical Thermal Resistance (Note 1)		R _{ΘJC}	2.0											°C/W
Storage and storage Temperature Range		T _J T _{STG}	(-55 to +150)											°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 SR820 THRU SB8100

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

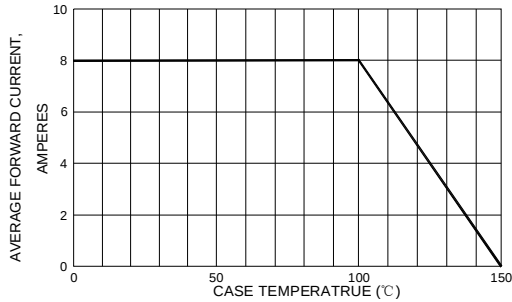


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTIC

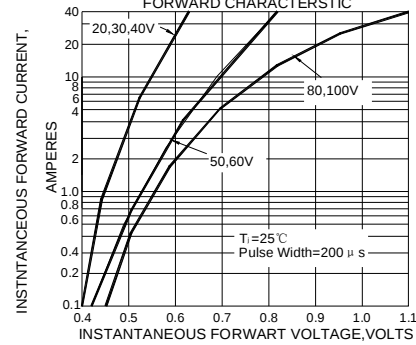


FIG.2-TYPICAL REVERSE
CHARACTERISTICS

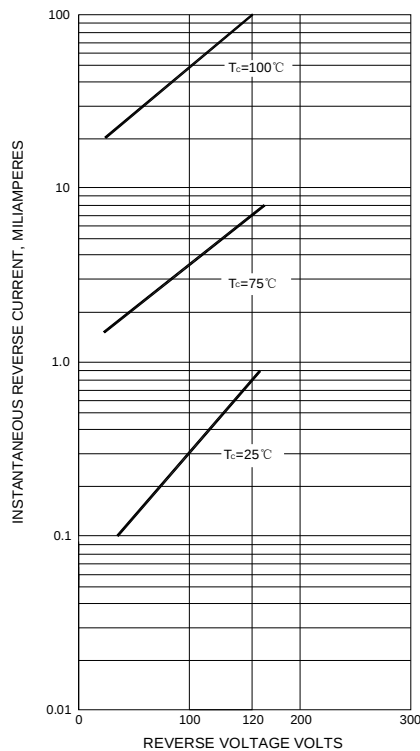


FIG.4-MAXIMUM NON-REPETITIVE
SURGE CURRENT

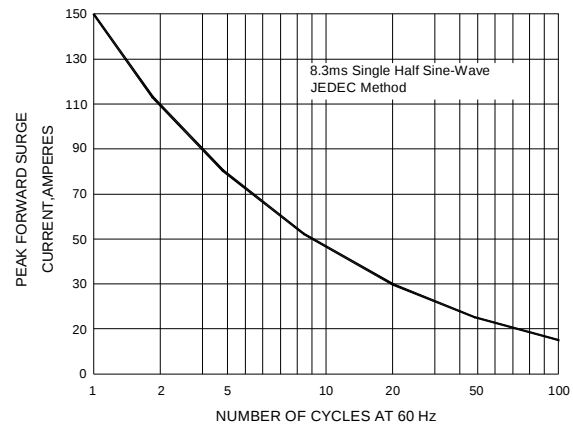


FIG.5-TYPICAL JUNCTION
CAPACITANCE

