SCHOTTKY BARRIER RECTIFIER

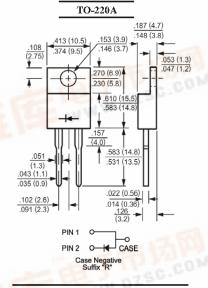
Reverse Voltage - 100 V Forward Current - 8 A

Features

- Schottky barrier chip
- Guard ring die construction for transient protection
- High surge capability
- Low power loss, high efficiency
- High current capability, Low forward voltage drop
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Mechanical Data

- Case: Molded plastic, TO-220A
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: As marked
- Mounting position: Any



Dimensions in inches and (millimeters)

Maximum Ratings and Characteristics

Ratings 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%.

Parameter	Symbols	SR8100R	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	100	V
Maximum RMS Voltage	V _{RMS}	70	V
Maximum DC Blocking Voltage	V _{DC}	100	V
Maximum Average Forward Rectified Current at T _C = 25 °C	I _{F(AV)}	8	Α
Non-Repetitive Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	150	А
Maximum Forward Voltage at 8 A and T _C = 25 °C	V _F	0.72	V
Maximum Reverse Current Rated DC Blocking Voltage at $T_C = 25$ °C at $T_C = 125$ °C	I _R	0.55 7	mA
Typical Junction Capacitance 1)	СЛ	350	pF
Typical Thermal Resistance Junction to Case 2)	$R_{\theta JC}$	WW 12.02.3	K/W
Operating Temperature Range	T _J	- 55 to + 150	°C
Storage Temperature Range	T_{stg}	- 55 to + 175	°C

¹⁾ Measured at 1 MHz and applied reverse voltage of 4 V.

²⁾Thermal Resistance from Junction to case mounted on heatsink.



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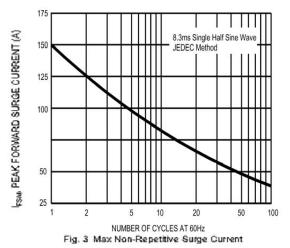
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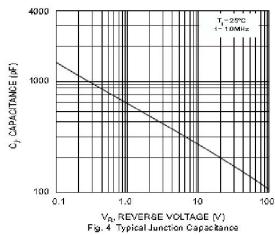
150

100

T_G, CASE TEMPERATURE (°C) Fig. 1 Forward Current Derating Curve

100 I_p. INSTANTANEOUS FORWARD CURRENT (A) 1.0 T, 25°C ⊫Puba Wata = 2% Outy Cycle 0.1 ø 1.0 $V_{\rm p}$, INSTANTANEOUS FORWARD VÖLTAGE (V) Fig. 2 Typical Forward Characteristics







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