

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE -30 to 60 Volts
FORWARD CURRENT -20 Amperes

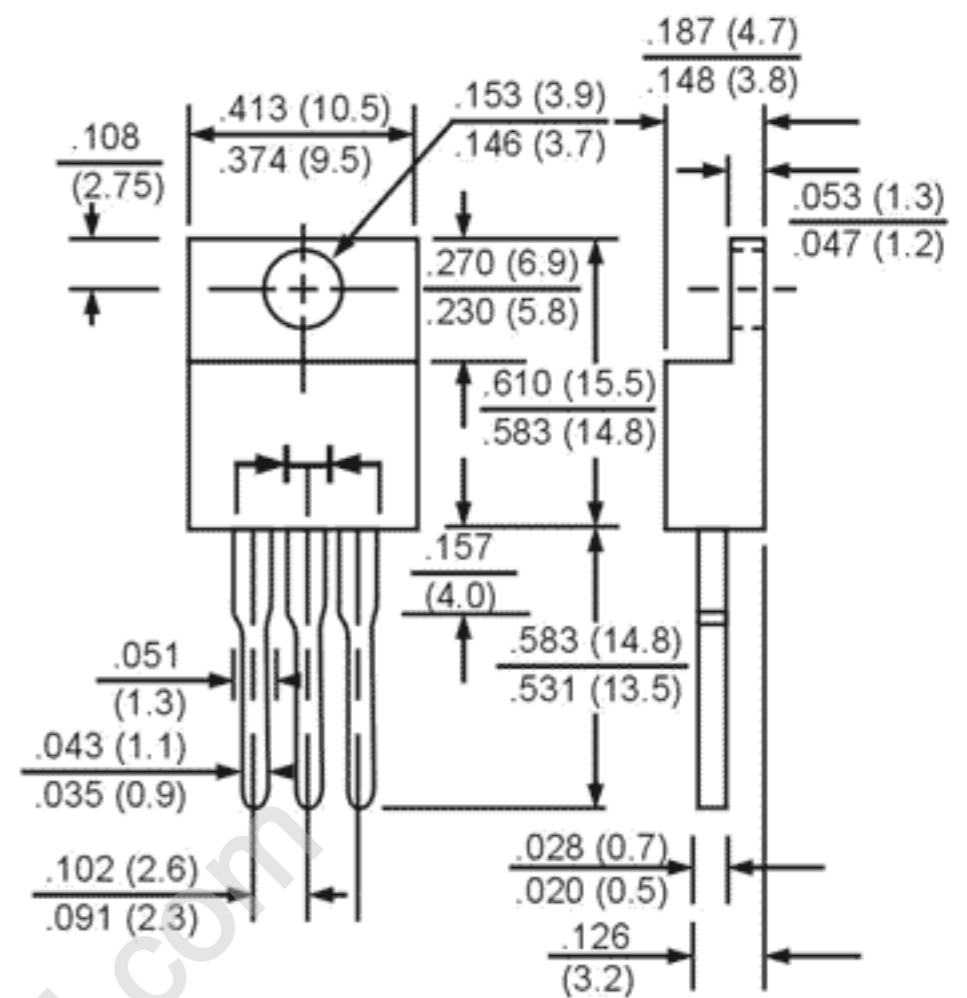
FEATURES

- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- Case: TO-220 molded plastic
- Polarity: As marked on the body
- Weight: 0.08 ounces, 2.24 grams
- Mounting position: Any

TO-220



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

CHARACTERISTICS	SYMBOL	SR2030	SR2035	SR2040	SR2045	SR2050	SR2060	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	30	35	40	45	50	60	V
Maximum RMS Voltage	V _{RMS}	21	24.5	28	31.5	35	42	V
Maximum DC Blocking Voltage	V _{DC}	30	35	40	45	50	60	V
Maximum Average Forward Rectified Current (See Fig. 1) @T _C = 95 °C	I _(AV)	20						A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	I _{FSM}	250						A
Maximum Forward Voltage at 10.0A DC (Note 1)	V _F	0.65				0.75		V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J = 25 °C @T _J =100°C	I _R	1				50		uA
Typical Junction Capacitance per element (Note 2)	C _J	600						pF
Typical Thermal Resistance (Note 3)	R _{θJC}	2.0						°C/W
Operating Temperature Range	T _J	-55 to +125						°C
Storage Temperature Range	T _{STG}	-55 to +150						°C

NOTES: 1. 300µs Pulse Width, 2% Duty Cycle
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Thermal Resistance Junction to Case.