

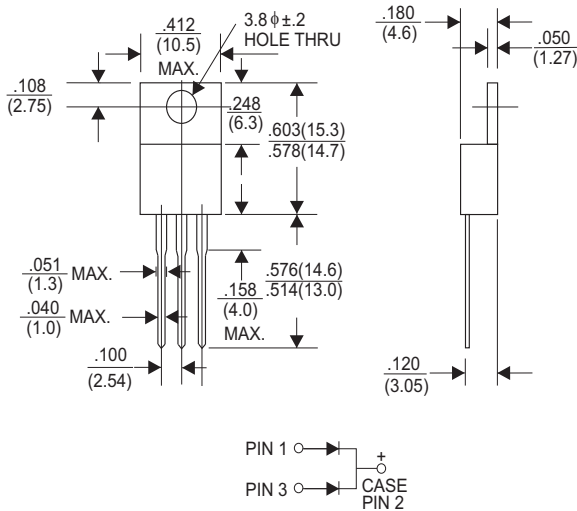


SR1020CT THER SR10200CT

SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 20 to 200 Volts Forward Current - 10.0 Ampere

TO-220AB



Dimensions in inches and (millimeters)

FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability
- * Epitaxial construction

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SR10 20CT	SR10 30CT	SR10 40CT	SR10 50CT	SR10 60CT	SR10 80CT	SR10 100CT	SR10 150CT	SR10 200CT	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	See Fig. 1									A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	10.0									A
Maximum Instantaneous Forward Voltage at 10.0A	0.55		0.70		0.85		0.95			V
Maximum DC Reverse Current Ta=25°C	0.05									mA
at Rated DC Blocking Voltage Ta=100°C	10									mA
Typical Junction Capacitance (Note1)	380									pF
Typical Thermal Resistance RθJA (Note 2)	55							62		°C/W
Operating Temperature Range Tj	-65 — +125				-65 — +150					°C
Storage Temperature Range Tstg	-65 — +150									°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

RATING AND CHARACTERISTIC CURVES (SR1020CT THRU SR10200CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

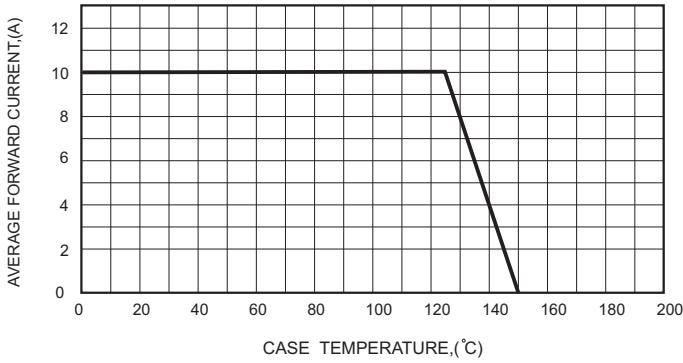


FIG.2-TYPICAL FORWARD CHARACTERISTICS

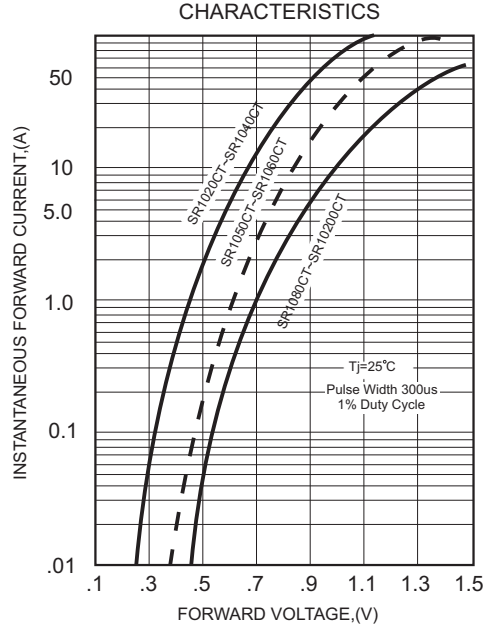


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

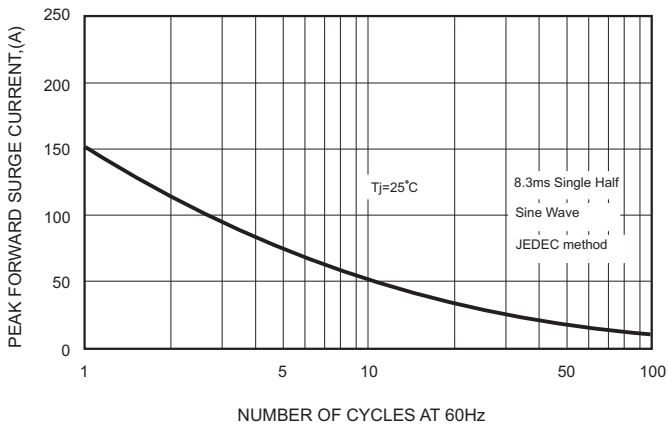


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

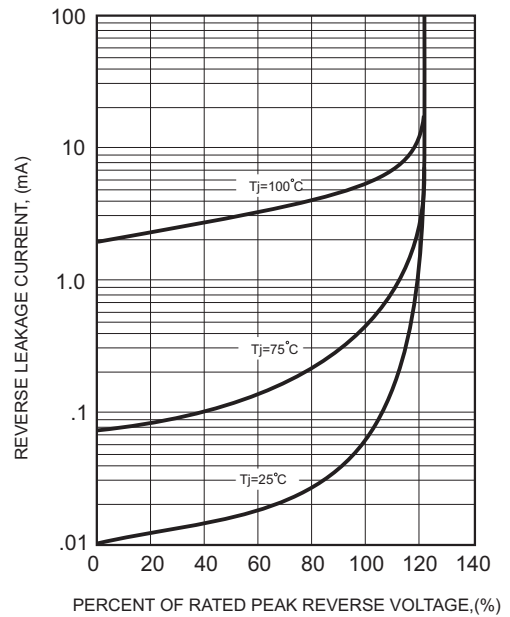


FIG.4-TYPICAL JUNCTION CAPACITANCE

