

SR16X0CT SERIES

SCHOTTKY BARRIER RECTIFIER

产

品

规

格

确

认

书

SR1620CT THRU SR16200CT

SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE: 20 to 200 VOLTS

FORWARD CURRENT: 16.0 AMPERE

FEATURES

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

MECHANICAL DATA

Case: Molded plastic, TO-220

Epoxy: UL 94V-0 rate flame retardant

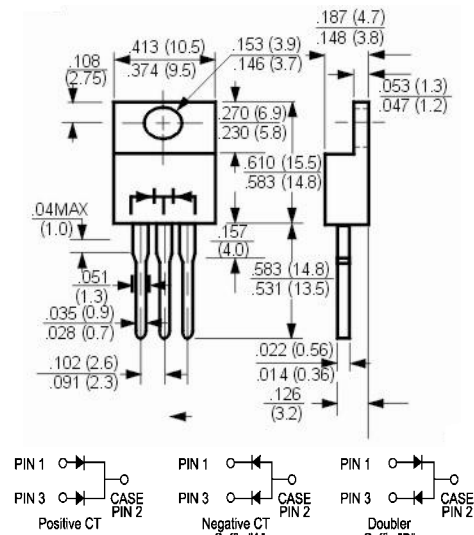
Terminals: Leads solderable per MIL-STD-202 method 208 guaranteed

Polarity: As marked

Mounting position: Any

Weight: 0.08ounce, 2.24gram

TO-220



Dimensions in inches and (millimeters)

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	SR1620CT	SR1630CT	SR1640CT	SR1650CT	SR1660CT	SR1680CT	SR16100CT	SR16150CT	SR16200CT	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current See Fig. 1	$I_{(AV)}$	16.0									Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200									Amp
Maximum Forward Voltage at 8.0A DC and 25°C	V_F	0.55			0.70		0.85		0.95		Volts
Maximum Reverse Current at Rated DC Blocking Voltage	I_R	at $T_C=25^\circ\text{C}$				0.5					mAmp
		at $T_C=100^\circ\text{C}$				50					
Typical Junction Capacitance (Note 1)	C_J	700			500						pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.0									°C/W
Operating Temperature Range	T_J	-55 to +125			-55 to +150						°C
Storage Temperature Range	T_{stg}	-55 to +150									°C

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance from Junction to Case Per Leg

SR1620CT THRU SR16200CT SCHOTTKY BARRIER RECTIFIER

RATINGS AND CHARACTERISTIC CURVES

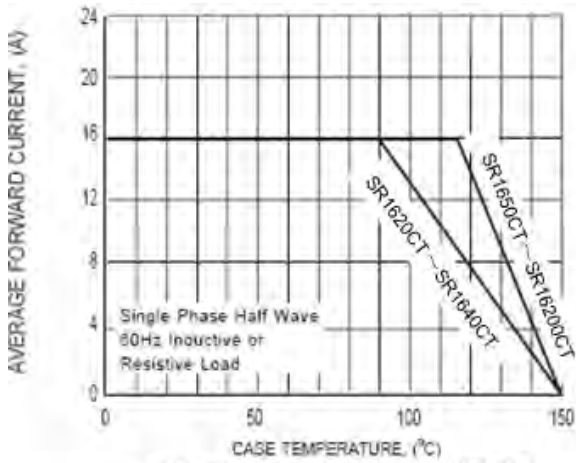


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

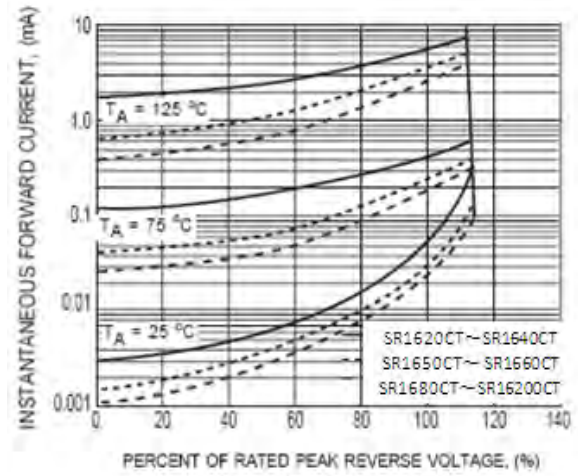


FIG.2 TYPICAL REVERSE CHARACTERISTICS

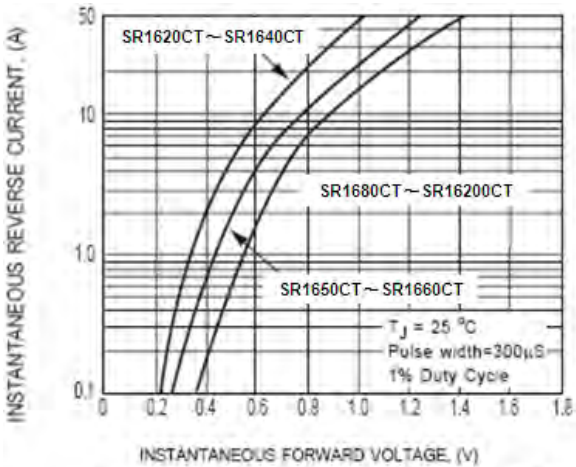


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

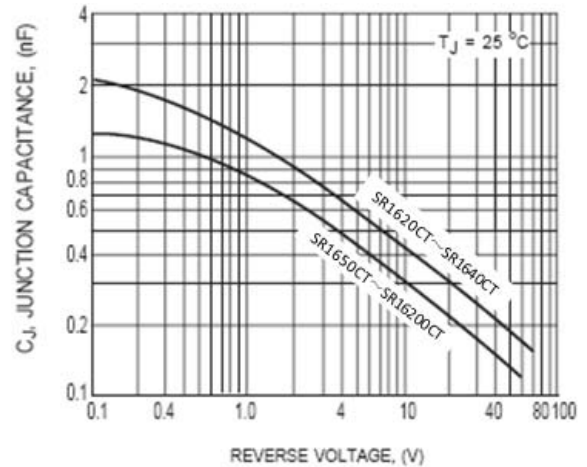


FIG.4 TYPICAL JUNCTION CAPACITANCE

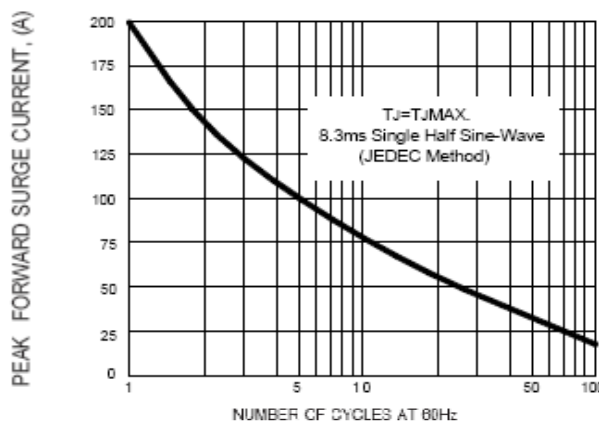


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT