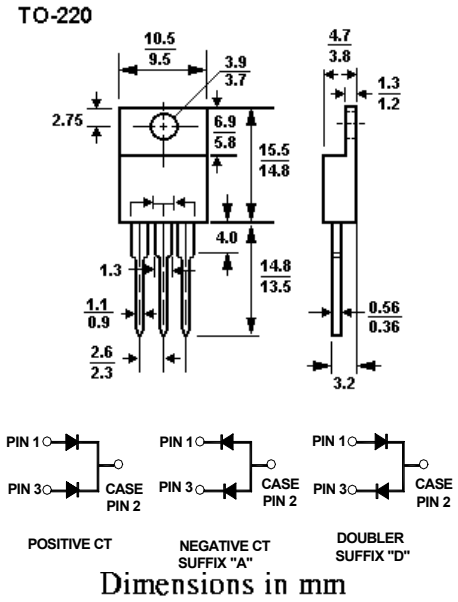
SR2020CT THRU SR2060CT

SCHOTTKY BARRIER RECTIFIERS
Reverse Voltage – 20 to 60 Volts
Forward Current – 20 Amperes



Dimensions in mm

Features

- Plastic package has Underwriters Laboratory 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 forward voltage
- High surge capacity
- For use in low voltage, high frequency inverters, free wheeling and polarity protection applications

Mechanical Data

- **Case:** Molded plastic body, TO-220
- **Epoxy:** UL 94V-O rate flame retardant
- **Terminals:** Leads solderable per MIL-STD-202, method 208
- **Polarity:** As marked
- **Mounting Position:** Any

Absolute Maximum Ratings and Characteristics

Ratings at 25^{0}C unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate by 20%.

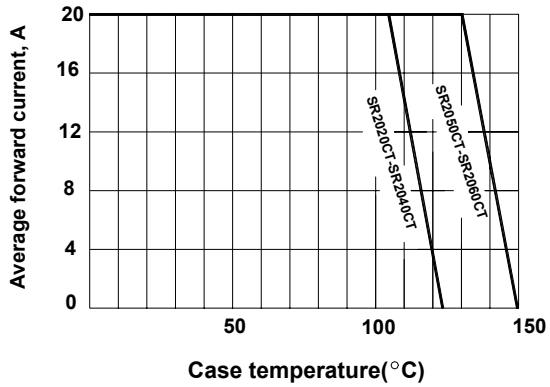
	Symbols	SR2020CT	SR2030CT	SR2040CT	SR2050CT	SR2060CT	Units
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	50	60	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	V
Maximum average forward rectified current (see fig.1)	$I_{(AV)}$	20					A
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	250					A
Maximum forward voltage at 10 A DC	V_F	0.55			0.70		V
Maximum reverse current T_C = 25 ^{O}C at rated blocking voltage T_C = 100^{O}C	I_R	1.0 50					mA
Typical junction capacitance (Note 1)	C_J	600			400		pF
Typical thermal resistance (Note 2)	$R_{\theta JC}$	2.0					^{O}C/W
Operating junction temperature range	T_J	-55 to +125			-55 to +150		^{O}C
Storage temperature range	T_S	-55 to +150					^{O}C

Notes: (1) Measured at 1MH$_Z$ and applied reverse voltage of 4 Volts DC

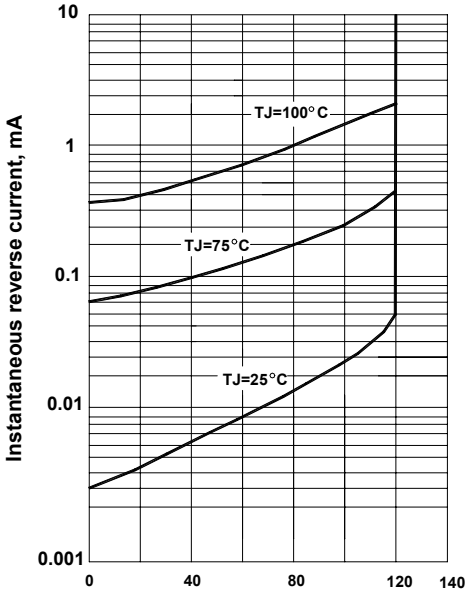
(2) Thermal Resistance from Junction to case per leg

SR2020CT THRU SR2060CT

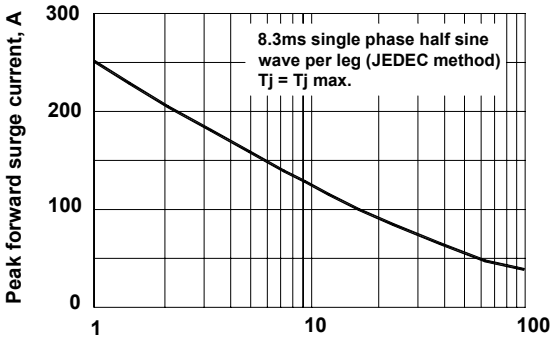
Forward current derating curve



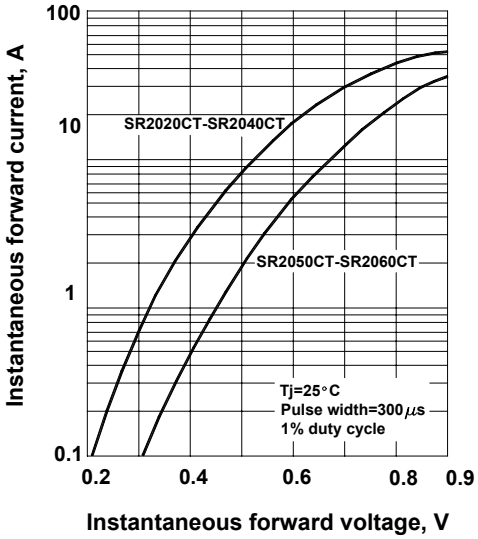
Typical reverse characteristics per leg



Maximum non-repeitive peak forward surge current per leg



Typical forward characteristics per leg



Typical junction capacitance per leg

