

SCHOTTKY BARRIER RECTIFIER

SR2020CT THRU SR20200CT 20 to 200 V 20A

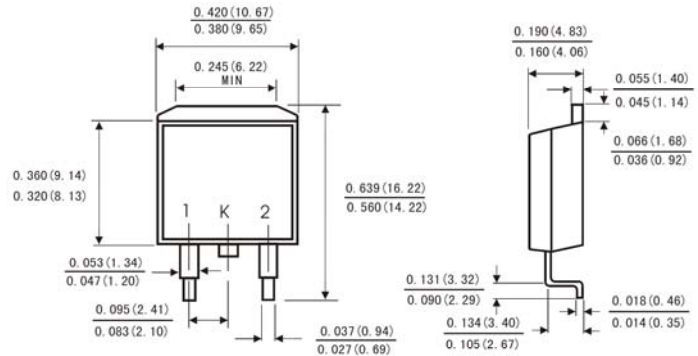
Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for over voltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- Dual rectifier construction
- High temperature soldering guaranteed:250 °C/10 seconds, 0.25"(6.35mm)from case

Mechanical Data

- Case: JEDEC TO-263 molded plastic body
- Terminals: Lead solder able per MIL-STD-202,method 208
- Polarity: As marked.
- Mounting Position: Any
- Weight: 0.0514ounce,1.46 grams

TO-263
D2PAK



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	SR 2020CT	SR 2030CT	SR 2040CT	SR 2050CT	SR 2060CT	SR 2080CT	SR 20100CT	SR 20150CT	SR 20200CT	Units
Maximum repetitive peak reverse voltage	VRRM	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage	VRMS	14	21	28	35	42	56	70	105	140	Volts
Maximum DC blocking voltage	VDC	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current See Fig.1	I(AV)	20.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	200.0									Amps
Maximum instantaneous forward voltage at 10.0 A	VF	0.60			0.75		0.85		0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	TC=25°C	0.2									mA
	TC=125°C	30			50						
Typical thermal resistance (Note 2)	RθJC	3.0									°C/W
Operating junction temperature range	TJ	-65 to+150									°C
Storage temperature range	TSTG	-65 to+150									°C

NOTES:

1. Pulse test: 300 μs pulse width, 1% duty cycle
2. Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES (SR2020CT THRU SR20200CT)

FIG.1-FORWARD CURRENT DERATING CURVE

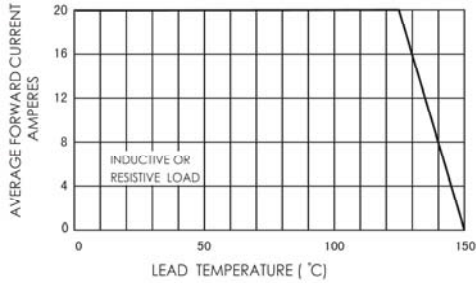


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

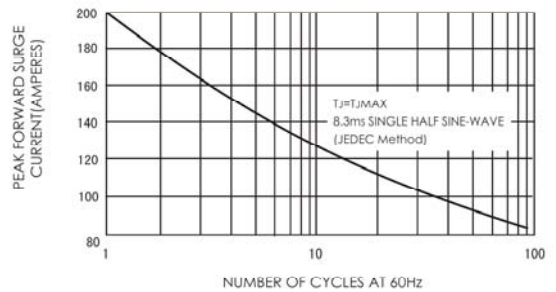


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

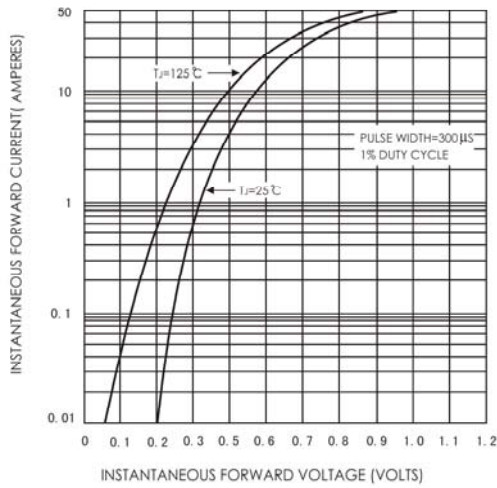


FIG.4-TYPICAL REVERSE CHARACTERISTICS

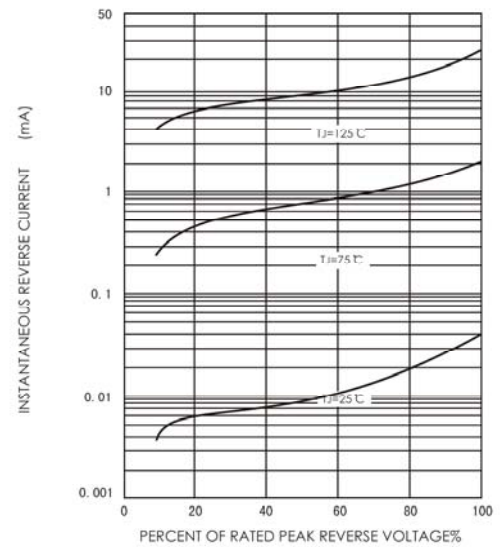


FIG.5-TYPICAL JUNCTION CAPACITANCE

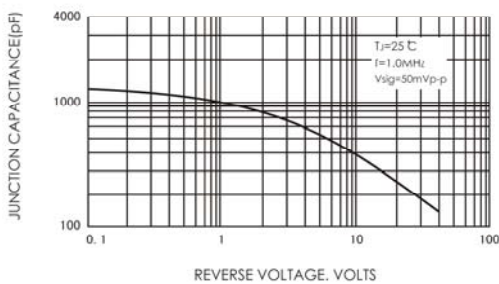


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

