

# Schottky Barrier Rectifiers

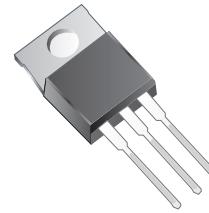
**Comchip**  
SMD Diode Specialist

## SR2030CT-G Thru. SR20150CT-G

**Voltage: 30 to 150 V**

**Current: 20.0 A**

**RoHS Device**

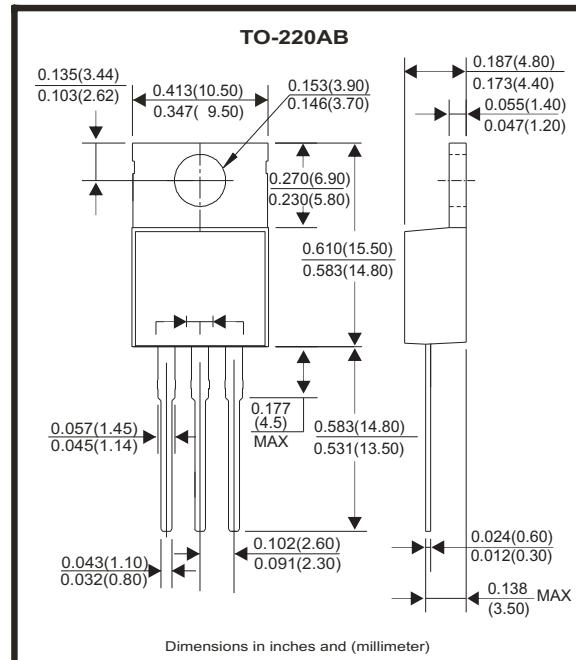


### Features

- 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.
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

### Mechanical Data

- Case: TO-220AB, molded plastic
- Epoxy: UL 94-V0 rate flame retardant.
- Polarity: As marked on the body.
- Mounting position: Any
- Weight: 2.24 grams



### Electrical Characteristics (at TA=25°C unless otherwise noted)

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%.

Parameter	Symbol	SR 2030CT-G	SR 2040CT-G	SR 2050CT-G	SR 2060CT-G	SR 2080CT-G	SR 20100CT-G	SR 20150CT-G	Unit
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	30	40	50	60	80	100	150	V
Maximum RMS voltage	V <sub>RMS</sub>	21	28	35	42	56	70	105	V
Maximum DC blocking voltage	V <sub>DC</sub>	30	40	50	60	80	100	150	V
Maximum average forward rectified current ( See Fig. 1 ) @ T <sub>c</sub> = 95°C	I <sub>(AV)</sub>					20.0			A
Peak forward surge current ,8.3ms single half sine-wave super imposed on rated load (JEDEC method)	I <sub>FSM</sub>					200			A
Peak forward voltage at 10.0A DC (Note 1)	V <sub>F</sub>		0.55		0.70		0.85	0.95	V
Maximum DC Reverse Current @ T <sub>j</sub> = 25°C at Rate DC Blocking Voltage @ T <sub>j</sub> = 100°C	I <sub>R</sub>				1.0				mA
					50				
Typical junction capacitance (Note2)	C <sub>J</sub>			600					pF
Typical thermal resistance (Note3)	R <sub>θJC</sub>			2.0					°C/W
Operating temperature range	T <sub>J</sub>			-55 to +150					°C
Storage temperature range	T <sub>STG</sub>			-55 to +150					°C

#### NOTES:

1. 300us pulse width, 2% duty cycle.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Thermal resistance junction to case.

REV:A

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## RATING AND CHARACTERISTIC CURVES (SR2030CT-G Thru. SR20150CT-G)

FIG.1- Forward Current Derating Curve

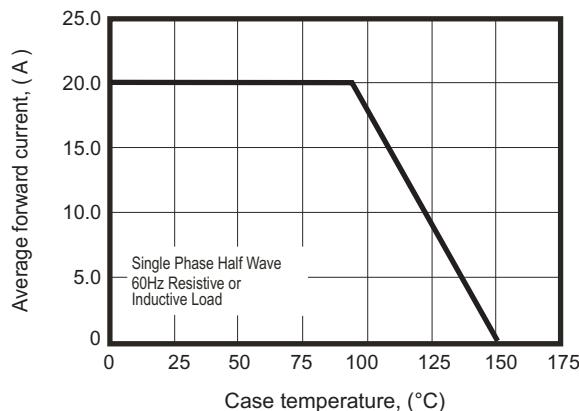


FIG.2- Maximum Non-Repetitive Surge Current

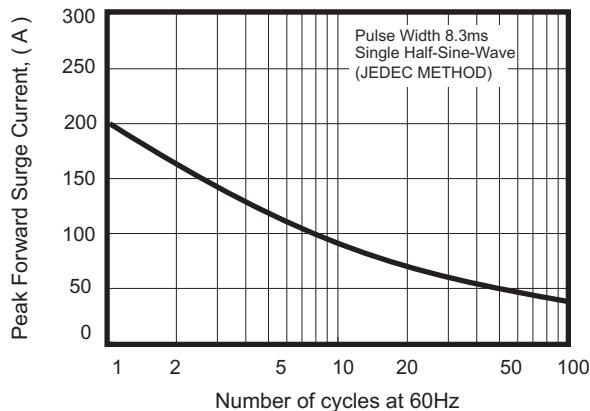


FIG.3- Typical Revers Characteristics

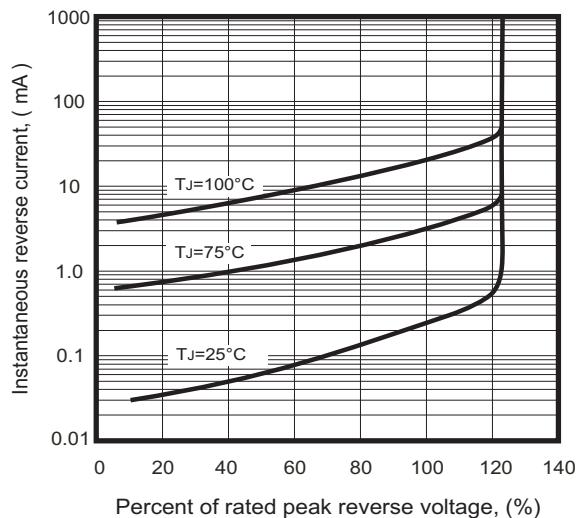


FIG.4- Typical Forward Characteristics

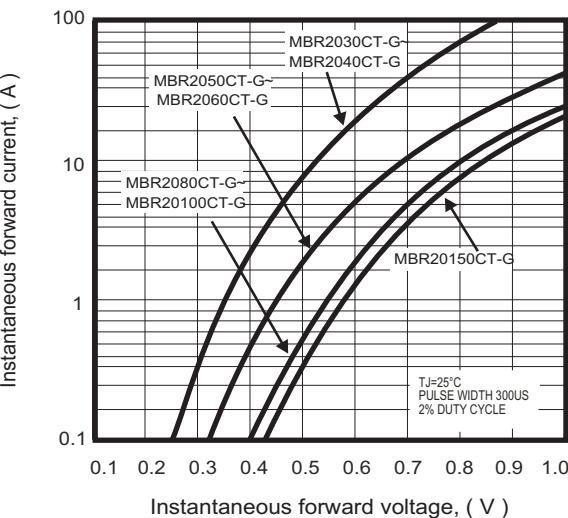
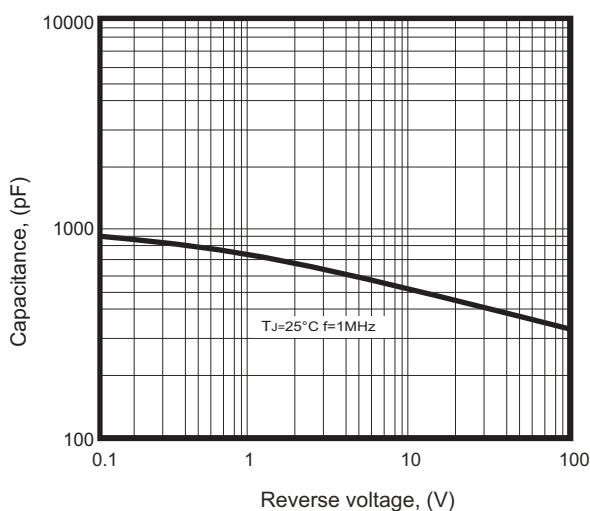
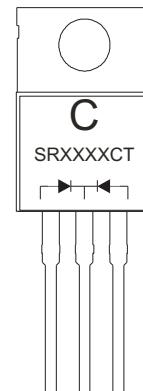


FIG.5- Typical Junction Capacitance



## Marking Code

Part Number	Marking code
SR2030CT-G	SR2030CT
SR2040CT-G	SR2040CT
SR2050CT-G	SR2050CT
SR2060CT-G	SR2060CT
SR2080CT-G	SR2080CT
SR20100CT-G	SR20100CT
SR20150CT-G	SR20150CT



**XXXX = Product type marking code**  
**C = Comchip Logo**

## Standard Packaging

Case Type	TUBE PACK	
	TUBE ( pcs )	BOX ( pcs )
TO-220AB	50	8,000