

Schottky Barrier Rectifiers

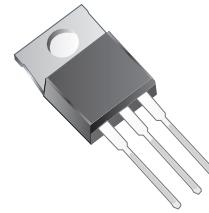
Comchip
SMD Diode Specialist

SR2030CT-G Thru. SR20150CT-G

Voltage: 30 to 150 V

Current: 20.0 A

RoHS Device

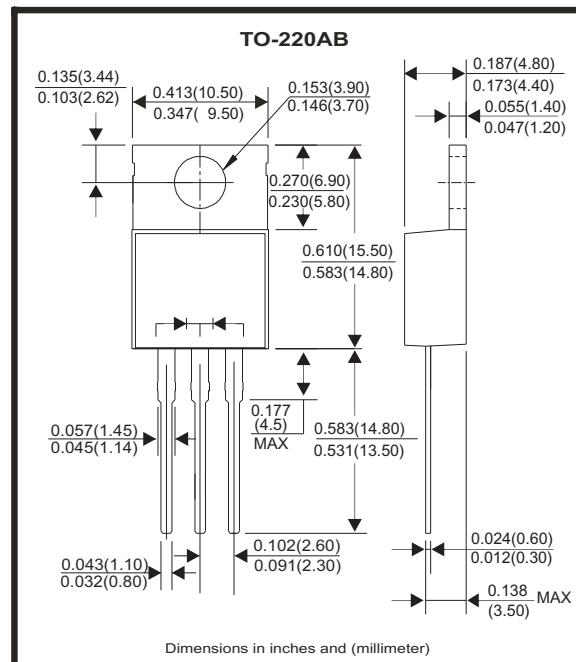


Features

- 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 _{RRM}	30	40	50	60	80	100	150	V
Maximum RMS voltage	V _{RMS}	21	28	35	42	56	70	105	V
Maximum DC blocking voltage	V _{DC}	30	40	50	60	80	100	150	V
Maximum average forward rectified current (See Fig. 1) @ T _c = 95°C	I _(AV)					20.0			A
Peak forward surge current ,8.3ms single half sine-wave super imposed on rated load (JEDEC method)	I _{FSM}					200			A
Peak forward voltage at 10.0A DC (Note 1)	V _F		0.55		0.70		0.85	0.95	V
Maximum DC Reverse Current @ T _j = 25°C at Rate DC Blocking Voltage	I _R				1.0				mA
					50				
Typical junction capacitance (Note2)	C _J			600					pF
Typical thermal resistance (Note3)	R _{θJC}			2.0					°C/W
Operating temperature range	T _J			-55 to +150					°C
Storage temperature range	T _{STG}			-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

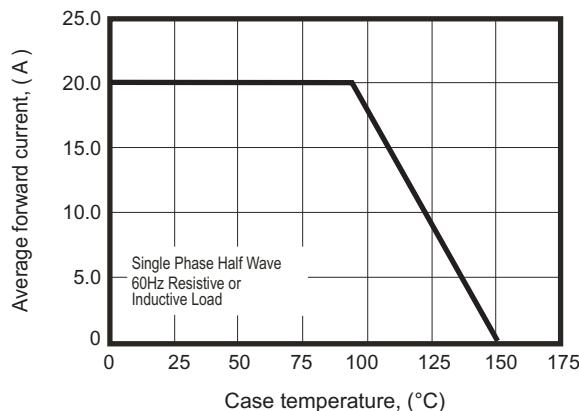


FIG.2- Maximum Non-Repetitive Surge Current

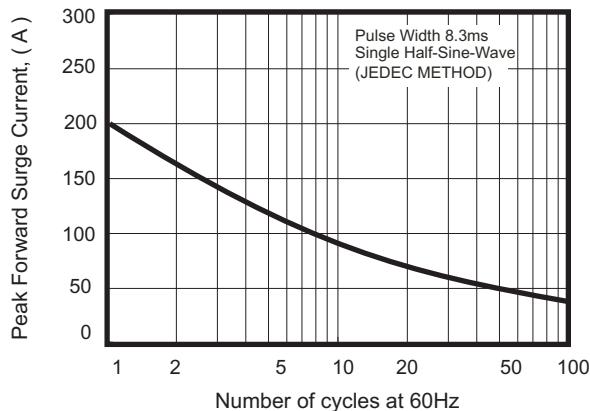


FIG.3- Typical Revers Characteristics

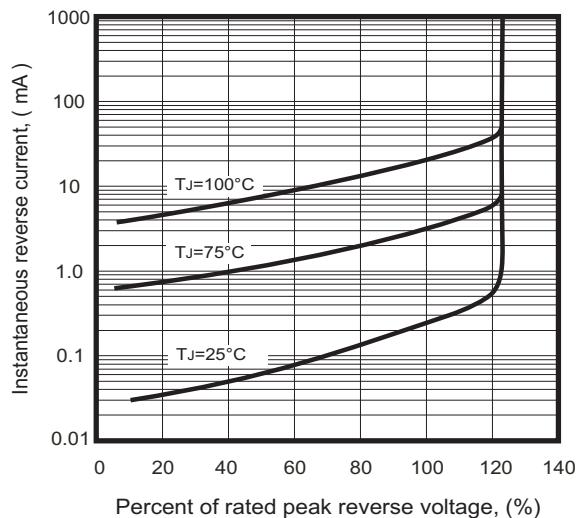


FIG.4- Typical Forward Characteristics

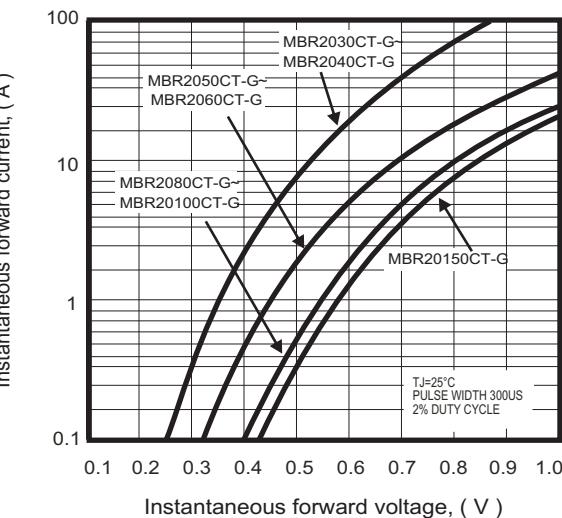
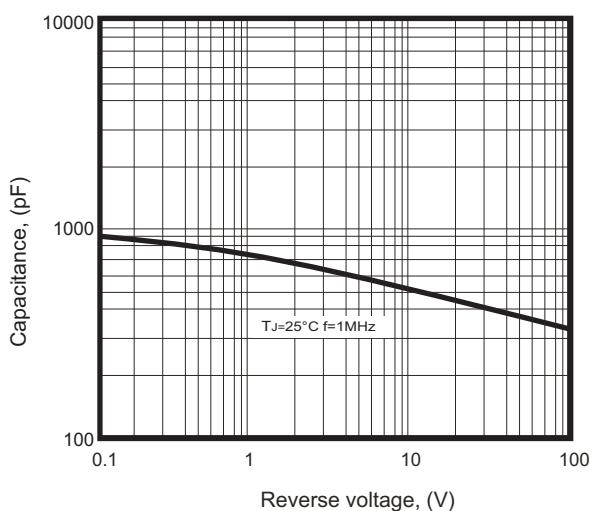
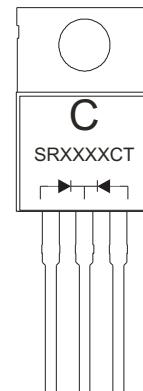


FIG.5- Typical Junction Capacitance



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