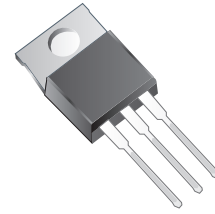


## SR2030CT-G Thru. SR20150CT-G

Voltage: 30 to 150 V

Current: 20.0 A

RoHS Device

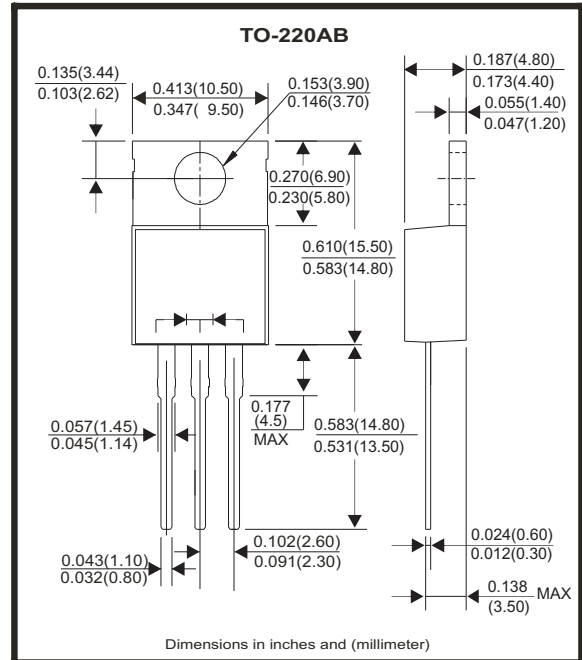


### Features

- 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 ) @ $T_c = 95^\circ C$	$I_{(AV)}$	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 at Rate DC Blocking Voltage	@ $T_J = 25^\circ C$	1.0							mA
	@ $T_J = 100^\circ C$	50							
Typical junction capacitance (Note2)	$C_J$	600							pF
Typical thermal resistance (Note3)	$R_{\theta JC}$	2.0							$^\circ C/W$
Operating temperature range	$T_J$	-55 to +150							$^\circ C$
Storage temperature range	$T_{STG}$	-55 to +150							$^\circ C$

NOTES:

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

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

FIG.1- Forward Current Derating Curve

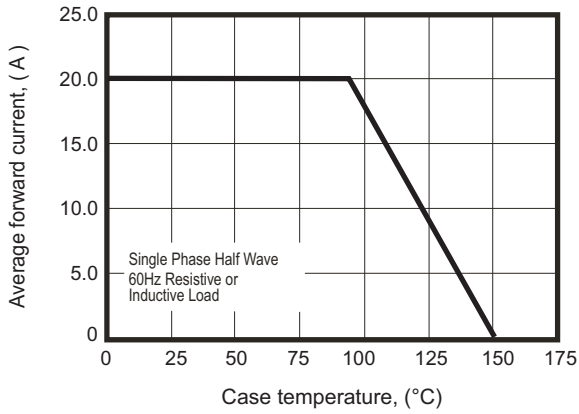


FIG.2- Maximum Non-Repetitive Surge Current

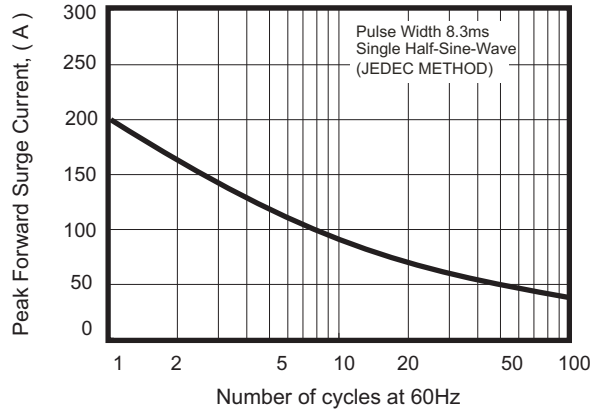


FIG.3- Typical Rever Characteristics

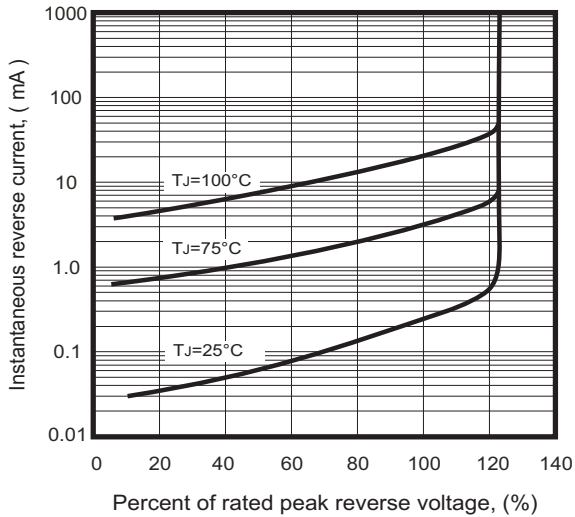


FIG.4- Typical Forward Characteristics

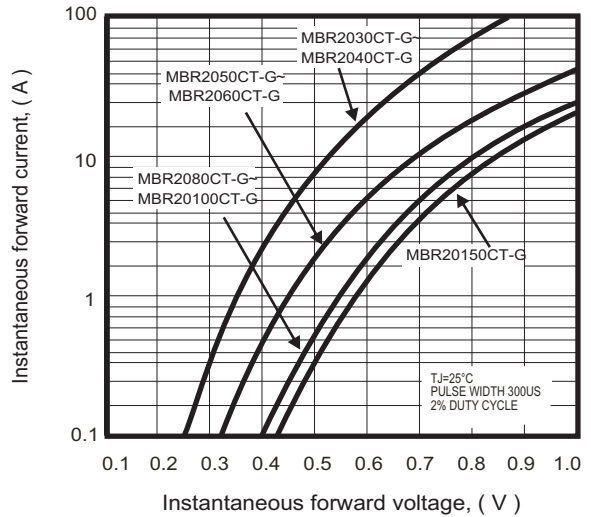
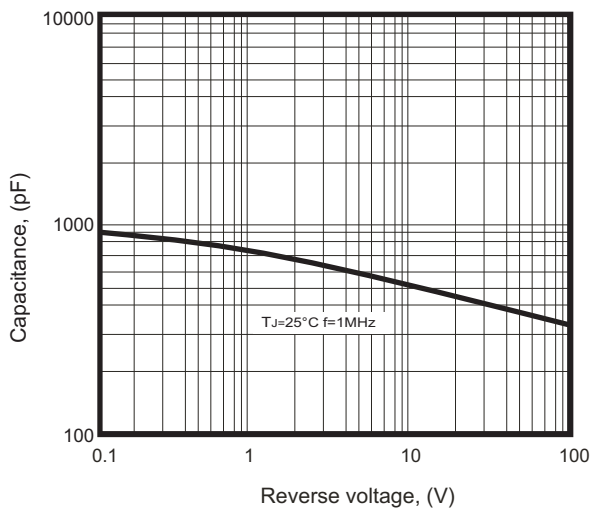
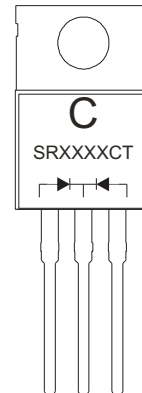


FIG.5- Typical Junction Capacitance



## 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