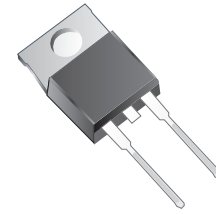


## SR1030-G Thru. SR10200-G

Forward current: 10A

Reverse voltage: 30 to 200V

RoHS Device

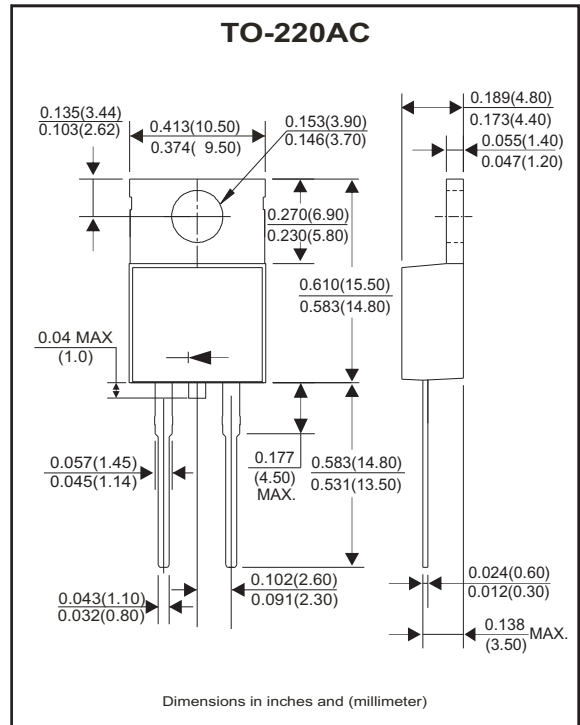


### Features

- 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-220AC, molded plastic.
- Epoxy: UL 94V-0 rate flame retardant.
- Polarity: As marked on the body.
- Mounting position: Any
- Weight: 2.24 grams



### 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%.

Characteristics	Symbol	SR10 30-G	SR10 40-G	SR10 50-G	SR10 60-G	SR10 80-G	SR10 100-G	SR10 150-G	SR10 200-G	Unit	
Maximum recurrent peak reverse voltage	$V_{RRM}$	30	40	50	60	80	100	150	200	V	
Maximum RMS voltage	$V_{RMS}$	21	28	35	42	56	70	105	140	V	
Maximum DC blocking voltage	$V_{DC}$	30	40	50	60	80	100	150	200	V	
Maximum average forward rectified current ( See Fig.1 ) @ $T_c=95^\circ C$	$I_{AV}$	10.0								A	
Peak forward surge current, 8.3ms single half sine-wave super imposed on rated load (JEDEC method)	$I_{FSM}$	175								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 @ $T_J=25^\circ C$ at rated DC blocking voltage @ $T_J=100^\circ C$	$I_R$					1.0				50	mA
Typical junction capacitance (Note 2)	$C_J$					500				pF	
Typical thermal resistance (Note 3)	$R_{\theta JC}$					2.5				$^\circ C/W$	
Operating temperature range	$T_J$					-55 ~ +125				$^\circ C$	
Storage temperature range	$T_{STG}$					-55 ~ +150				$^\circ C$	

NOTES: 1. 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.

Company reserves the right to improve product design , functions and reliability without notice.

REV:B

## RATING AND CHARACTERISTIC CURVES (SR1030-G Thru. SR10200-G)

Fig.1 Forward Current Derating Curve

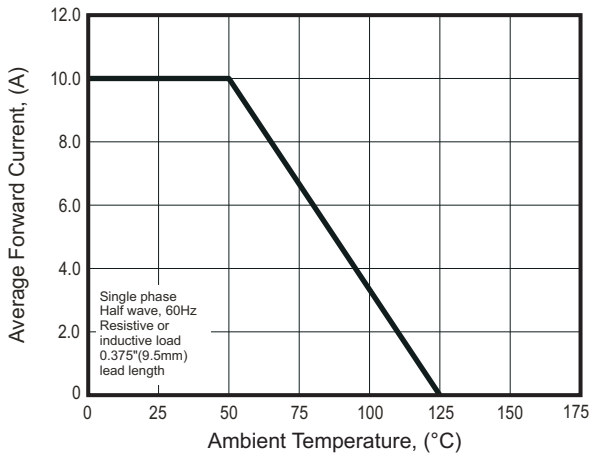


Fig.2 Max. Non-repetitive Surge Current

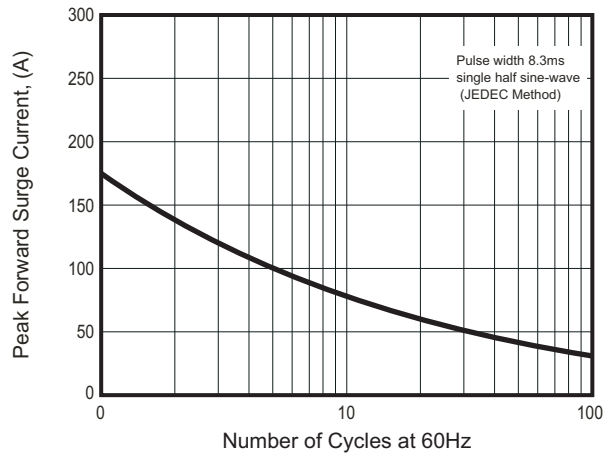


Fig.3 Typical Reverse Characteristics

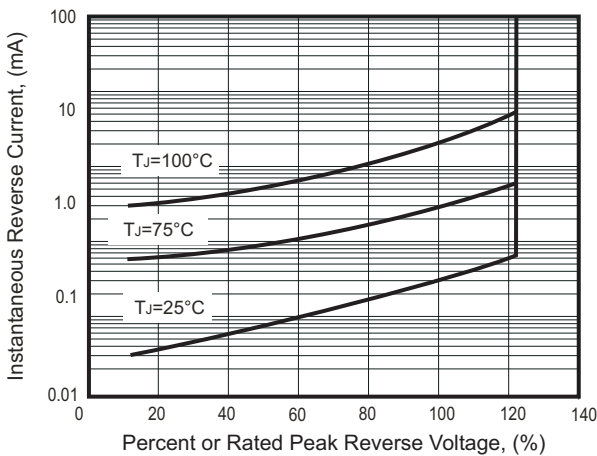


Fig.4 Typical Forward Characteristics

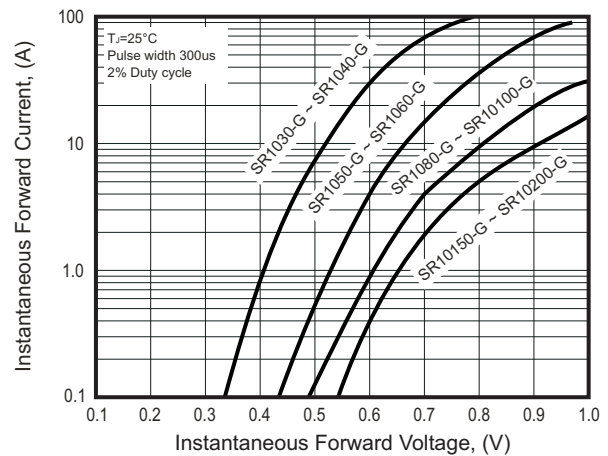
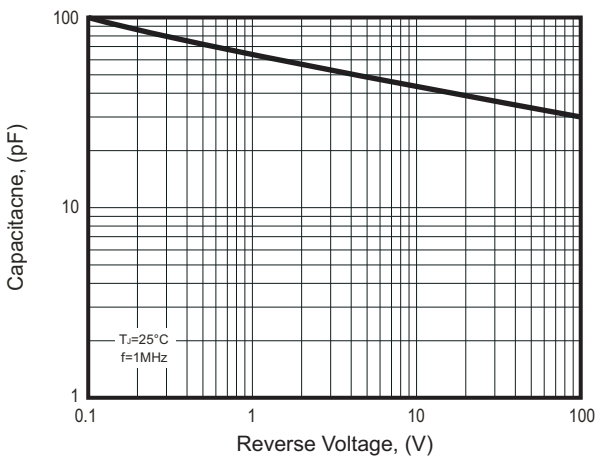


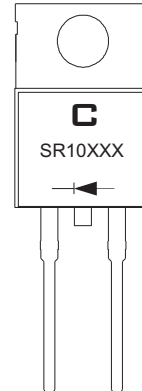
Fig.5 Typical Junction Capacitance



Company reserves the right to improve product design, functions and reliability without notice.

## Marking Code

Part Number	Marking code
SR1030-G	SR1030
SR1040-G	SR1040
SR1050-G	SR1050
SR1060-G	SR1060
SR1080-G	SR1080
SR10100-G	SR10100
SR10150-G	SR10150
SR10200-G	SR10200



**C** = Compchip Logo  
**XXX** = Product type marking code

## Standard Packaging

Case Type	TUBE PACK	
	TUBE ( pcs )	BOX ( pcs )
TO-220AC	50	2,000