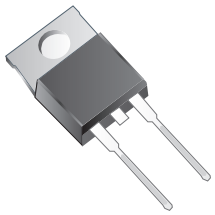
SR1030-G Thru. SR10200-G

Forward current: 10A
Reverse voltage: 30 to 200V
RoHS Device



Features

-Metal of silicon rectifier , majority carrier conduction.

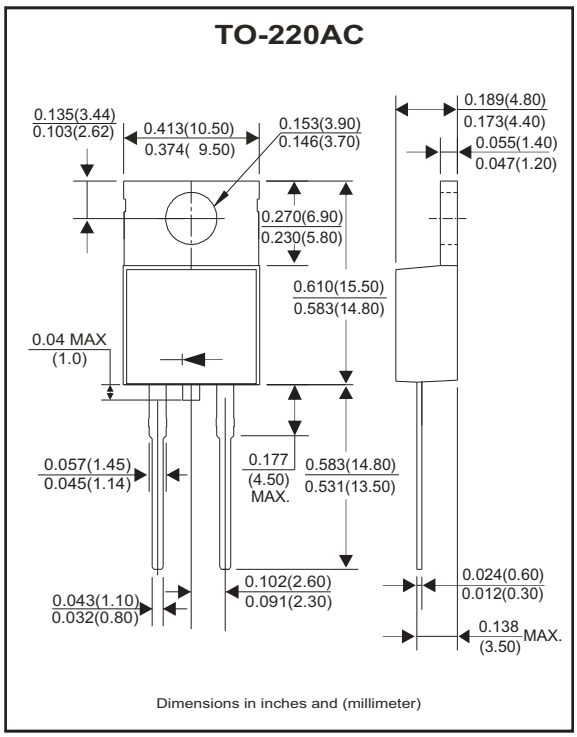
-Guard ring for transient protection.

-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°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°C at rated DC blocking voltage @T_J=100°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								°C/W
Operating temperature range	T_J	-55 ~ +125								°C
Storage temperature range	T_{STG}	-55 ~ +150								°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.

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

Fig.1 Forward Current Derating Curve

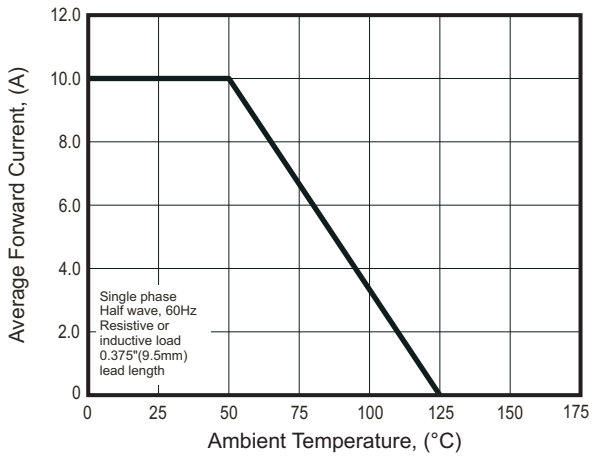


Fig.2 Max. Non-repetitive Surge Current

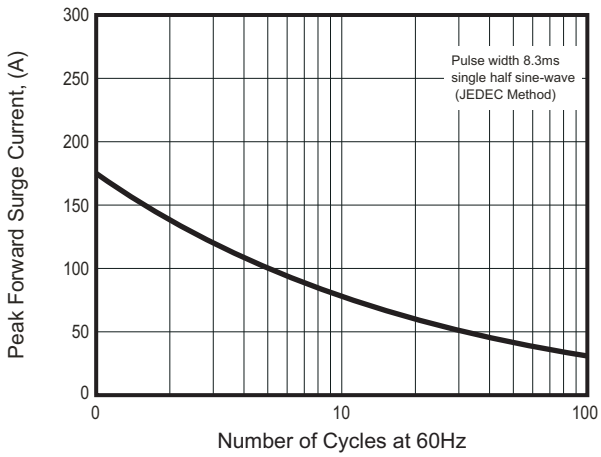


Fig.3 Typical Reverse Characteristics

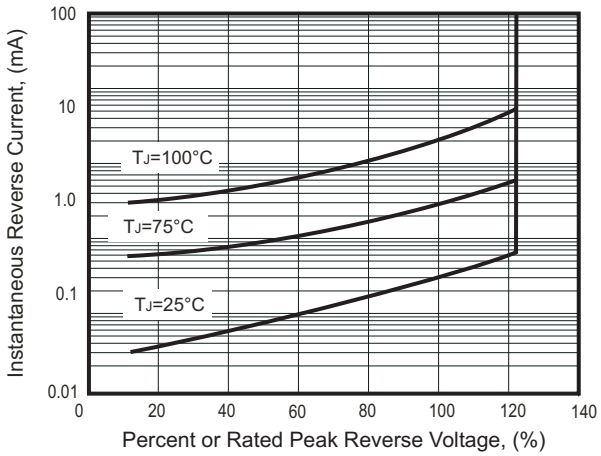


Fig.4 Typical Forward Characteristics

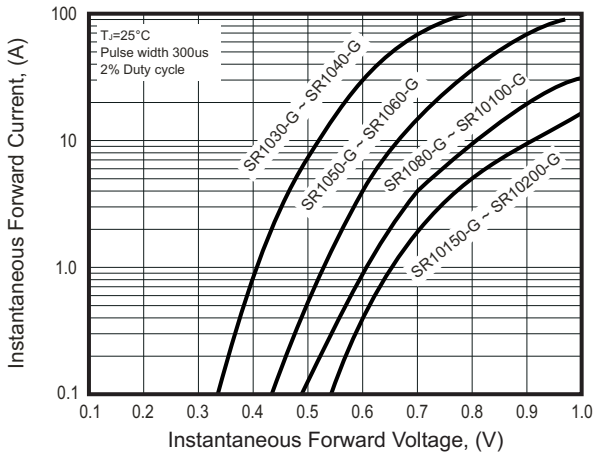
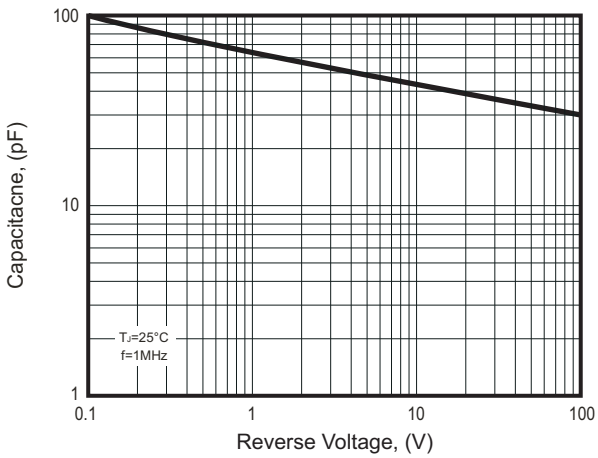


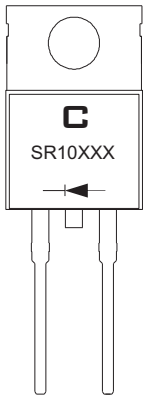
Fig.5 Typical Junction Capacitance



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



⊏ = Compchip Logo
XXX = Product type marking code

Standard Packaging

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Comchip Technology:

SR10200-G