

Schottky Barrier Rectifier

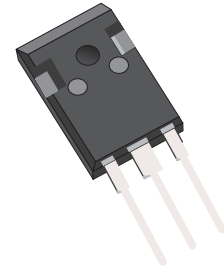


SR3030PT-G Thru. SR30150PT-G

Reverse Voltage: 30 to 1000V

Forward Current: 30.0A

RoHS Device

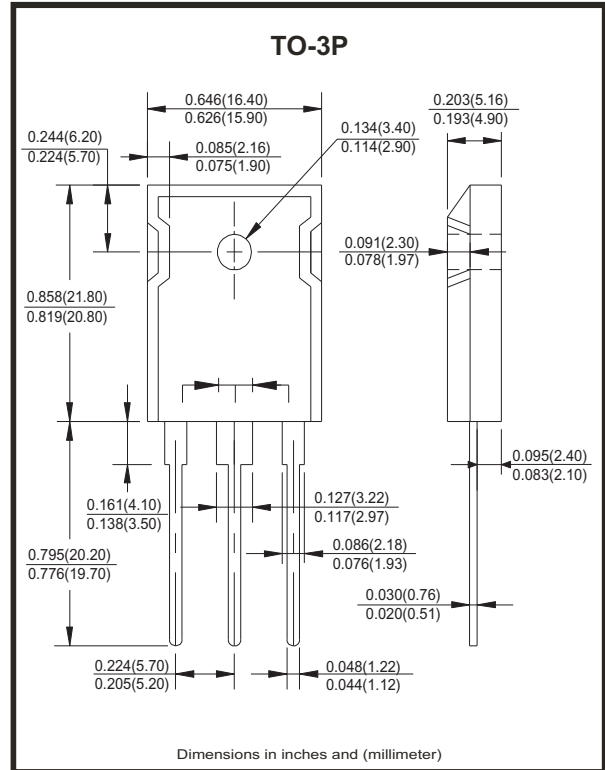


Features

- 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-3P, molded plastic
- Epoxy: UL 94-V0 rate flame retardant.
- Polarity: As marked on the body.
- Mounting position: Any
- Weight: 5.6 grams



Maximum ratings and electrical characteristics

Rating 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	SR3030 PT-G	SR3040 PT-G	SR3050 PT-G	SR3060 PT-G	SR3080 PT-G	SR30100 PT-G	SR30150 PT-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) @ $T_c=95^\circ C$	$I_{(AV)}$	30							A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I_{FSM}	275							A
Peak Forward Voltage at 15.0A DC	V_F	0.55		0.70		0.85		0.95	V
Maximum DC Reverse Current @ $T_J=25^\circ C$ At Rate DC Blocking Voltage @ $T_J=100^\circ C$	I_R	1.0 75							mA
Typical Junction Capacitance (Note 1)	C_J	700							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	2.0							$^\circ C/W$
Operating Temperature Range	T_J	-55 to +125							$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ C$

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance junction to case.

REV:A

Rating and Characteristics Curves (SR3030PT-G Thru. SR30150PT-G)

Fig.1- Forward Current Derating Curve

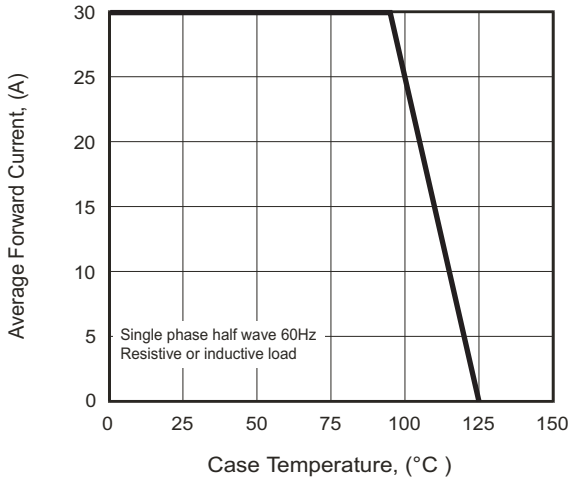


Fig.2- Typical Forward Characteristics

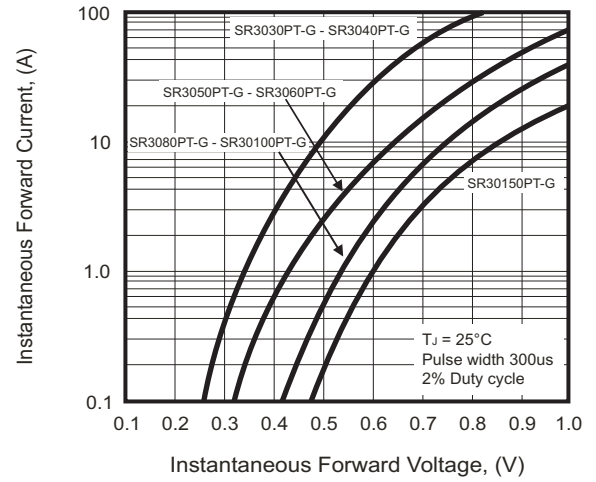


Fig.3- Maximum Non-Repetitive Surge Current

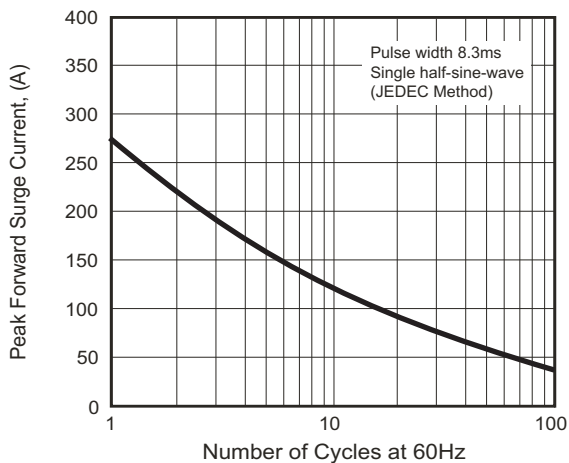


Fig.4- Typical Junction Capacitance

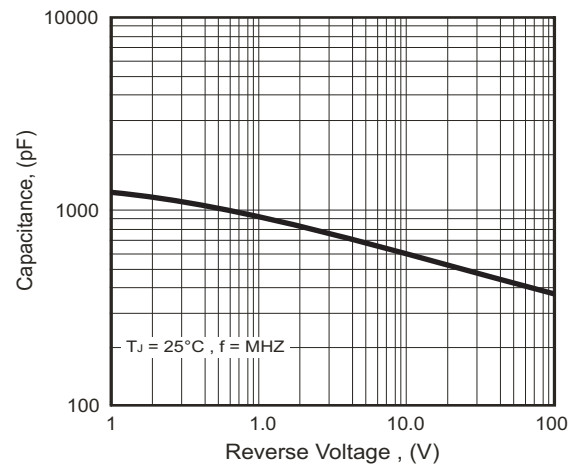
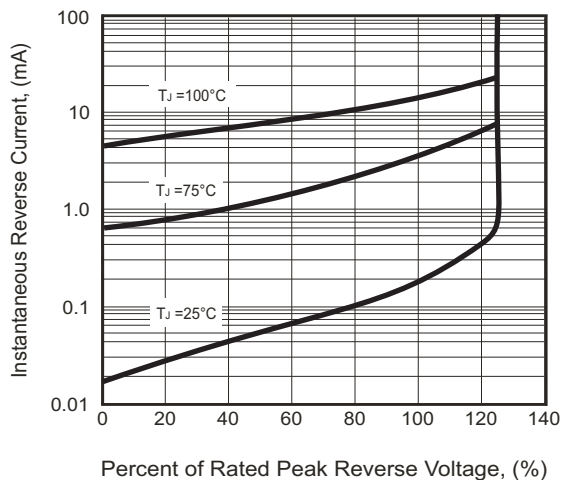
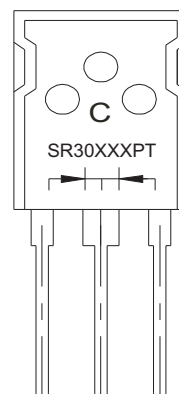


Fig.5- Typical Reverse Characteristics



Marking Code

Part Number	Marking code
SR3030PT-G	SR3030PT
SR3040PT-G	SR3040PT
SR3050PT-G	SR3050PT
SR3060PT-G	SR3060PT
SR3080PT-G	SR3080PT
SR30100PT-G	SR30100PT
SR30150PT-G	SR30150PT



XX / XXX = Product type marking code
C = Comchip Logo

Standard Package

Case Type	BULK PACK	
	BOX (pcs)	CARTON (pcs)
TO-3P	500	2,000