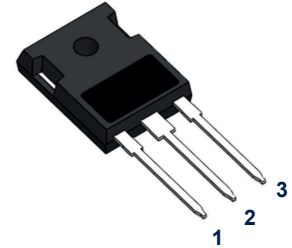


GSR2020PT thru GSR20200PT

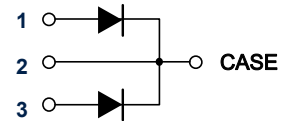
Schottky Barrier Rectifiers
 Reverse Voltage 20V to 200V Forward Current 20A

Features

- Plastic package has underwriters laboratory flammability classification 94V-0
- Metal silicon junction, majority carrier conduction
- Guard ring for over-voltage protection
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling and polarity protection applications
- Dual rectifier construction
- High temperature soldering guaranteed: 260°C /10 seconds, 0.25" (6.35mm) from case
- Component in accordance to RoHS 2011/65/EU



TO-247AB



Schematic Diagram

Mechanical Data

- Case: TO-247AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750, method 2026
- Polarity: As marked
- Mounting position: Any

Maximum Ratings and Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified, single phase, half wave, resistive or inductive load. For capacitive load, derate by 20%.)

Parameters	Symbols	GSR	GSR	GSR	GSR	GSR	GSR	GSR	Units
		2020PT	2030PT	2040PT	2060PT	20100PT	20150PT	20200PT	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	60	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	42	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	60	100	150	200	V
Maximum Average Forward Rectified Current (see Fig.1)	Per leg	10.0							A
	Total device	20.0							
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	200.0							A
Maximum Instantaneous Forward Voltage per Diode @ $I_F=10A$	V_F	0.60		0.75	0.85	0.90	0.95	V	
Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage ¹	$T_A=25^\circ C$	200				50			μA
	$T_A=100^\circ C$	5				-			mA
	$T_A=125^\circ C$	-				5			
Typical Thermal Resistance ²	$R_{\theta JC}$	2.5							$^\circ C/W$
Operating Junction Temperature Range	T_J	-65 to +150							$^\circ C$
Storage Temperature Range	T_{STG}	-65 to +150							$^\circ C$

Notes:

1. Pulse test: 300us pulse width, 1% duty cycle.
2. Thermal resistance from junction to case.

Ratings and Characteristic Curves

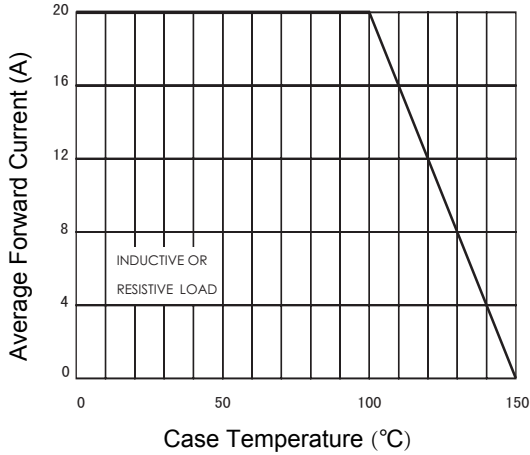


Figure 1. Forward Current Derating Curve

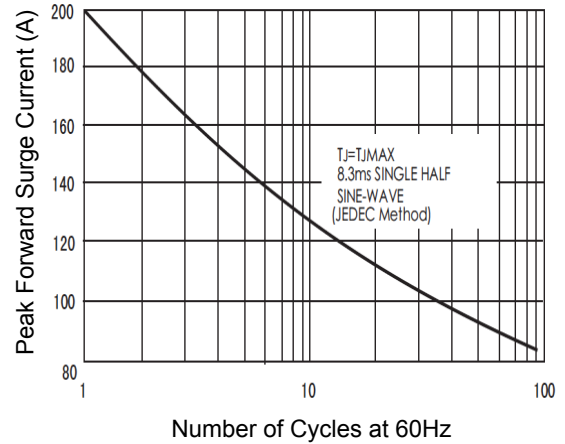


Figure 2. Max. Non-Repetitive Peak Forward Surge Current

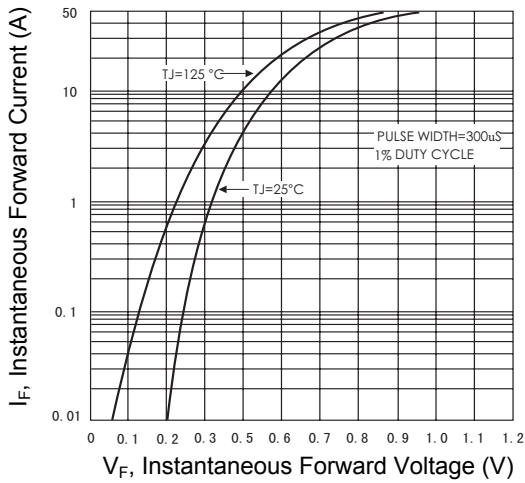


Figure 3. Typical Instantaneous Forward Characteristics

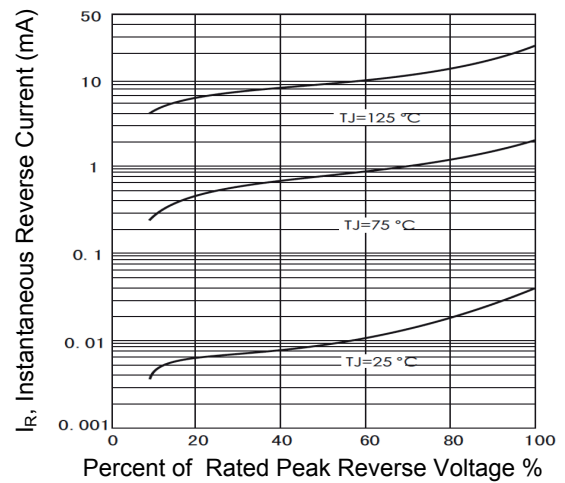


Figure 4. Typical Reverse Characteristics

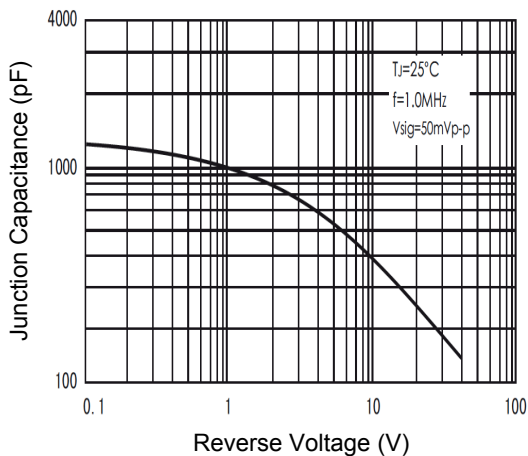
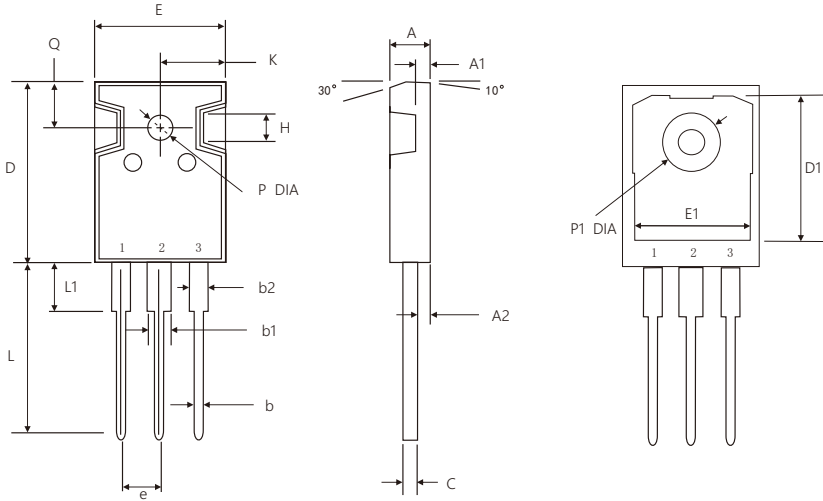


Figure 5. Typical Junction Capacitance

GSR2020PT thru GSR20200PT

Schottky Barrier Rectifiers
 Reverse Voltage 20V to 200V Forward Current 20A

Package Outline Dimensions (TO-247AB)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.70	5.30	0.185	0.209
A1	1.80	2.20	0.071	0.087
A2	2.24	2.58	0.088	0.102
b	1.00	1.40	0.039	0.055
b1	2.60	3.60	0.102	0.142
b2	1.60	2.60	0.063	0.102
C	0.40	0.80	0.016	0.031
D	20.00	22.00	0.787	0.866
D1	16.25	16.85	0.640	0.663
E	15.40	16.40	0.606	0.646
E1	13.10	13.50	0.516	0.531
L	19.60	20.40	0.772	0.803
e	5.20	5.70	0.205	0.224
L1	3.80	4.50	0.150	0.177
P	3.00	3.70	0.118	0.146
P1	-	7.30	-	0.287
Q	5.40	6.40	0.213	0.252
K	7.40	8.20	0.291	0.323
H	4.60 TYP		0.181 TYP	

GSR2020PT thru GSR20200PT

Schottky Barrier Rectifiers
 Reverse Voltage 20V to 200V Forward Current 20A

Order Information

Device	Package	Marking	Carrier	Quantity
GSR2020PT	TO-247AB	SR2020PT	Tube	30pcs / Tube
GSR2030PT	TO-247AB	SR2030PT	Tube	30pcs / Tube
GSR2040PT	TO-247AB	SR2040PT	Tube	30pcs / Tube
GSR2060PT	TO-247AB	SR2060PT	Tube	30pcs / Tube
GSR20100PT	TO-247AB	SR20100PT	Tube	30pcs / Tube
GSR20150PT	TO-247AB	SR20150PT	Tube	30pcs / Tube
GSR20200PT	TO-247AB	SR20200PT	Tube	30pcs / Tube

For more information, please contact us at: inquiry@goodarksemi.com