

Features

- High voltage
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 250 °C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0



Package: DO-204AC(DO-15)

Mechanical Data

- Case: JEDEC DO-15 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.014 ounce, 0.40 grams



Maximum Ratings & Electrical Characteristics

($T_A=25^{\circ}\text{C}$ unless otherwise specified, Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.)

Parameter	Symbol	GSR 1200	GSR 1500	GSR 1800	GSR 2000	GSR 2500	GSR 3000	GSR 4000	GSR 5000	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1200	1500	1800	2000	2500	3000	4000	5000	V
Maximum RMS Voltage	V_{RMS}	840	1050	1260	1400	1750	2100	2800	3500	V
Maximum DC Blocking Voltage	V_{DC}	1200	1500	1800	2000	2500	3000	4000	5000	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length (Fig.1)	$I_{(AV)}$	0.5			0.2					A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30.0								A
Maximum Instantaneous Forward Voltage at I_{AV}	V_F	2.0		3.0		4.0	5.0			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A=25^{\circ}\text{C}$	5.0								uA
	@ $T_A=100^{\circ}\text{C}$	50.0								
Typical Junction Capacitance ¹	C_J	15.0								pF
Typical Thermal Resistance ²	$R_{\theta JA}$	50.0								$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	-65 to +175								$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65 to +175								$^{\circ}\text{C}$

Notes:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted.

Ratings and Characteristics Curves

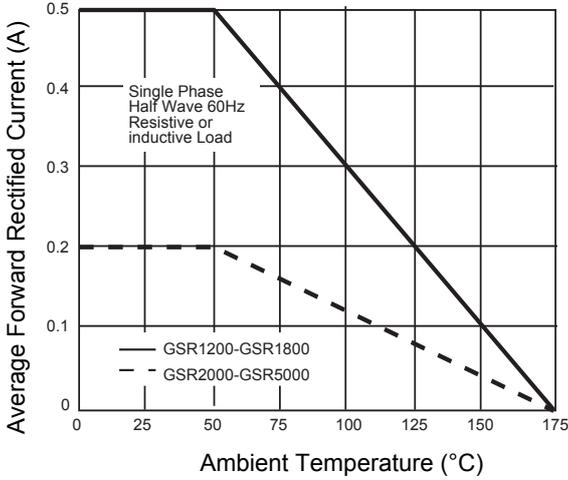


Figure 1. Forward Current Derating Curve

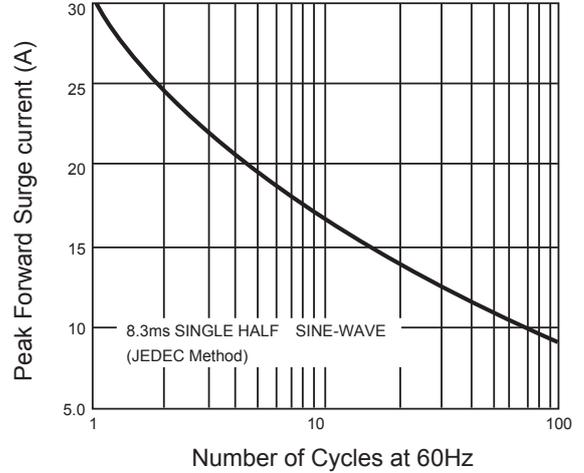


Figure 2. Maximum Non-repetitive Peak Forward Surge Current

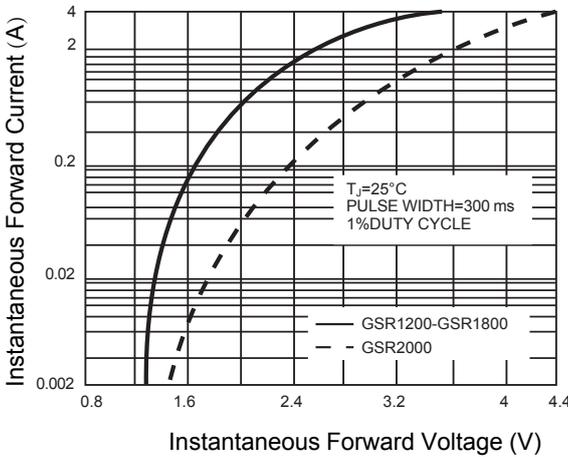


Figure 3. Typical Instantaneous Forward Characteristics

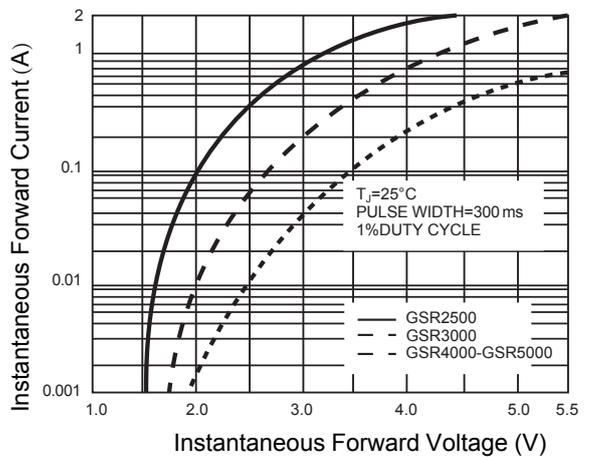


Figure 4. Typical Instantaneous Forward Characteristics

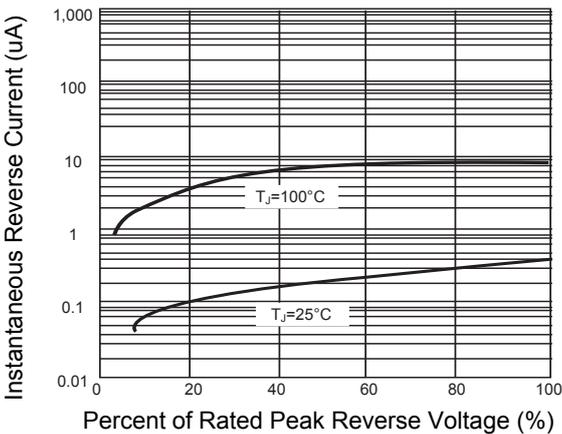


Figure 5. Typical Reverse Characteristics

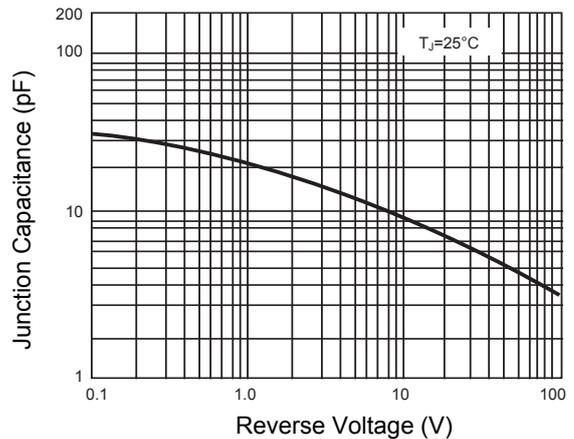


Figure 6. Typical Junction Capacitance

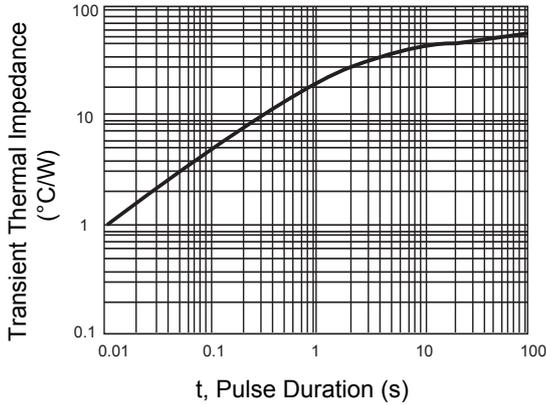
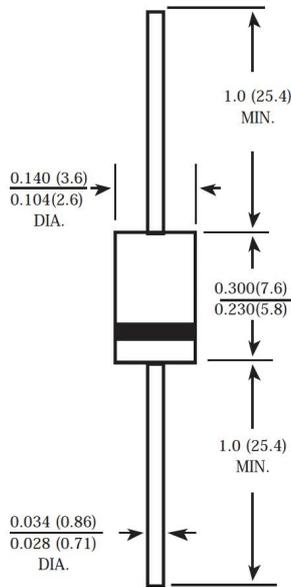


Figure 7. Typical Transient Thermal Impedance

Package Outline Dimensions DO-204AC(DO-15)



Dimensions in inches and (millimeters)

Order Information

Device	Package	Marking	Quantity	HSF Status
GSR1200	DO-204AC(DO-15)	R1200	3,000pcs / Box	RoHS Compliant
GSR1500	DO-204AC(DO-15)	R1500	3,000pcs / Box	RoHS Compliant
GSR1800	DO-204AC(DO-15)	R1800	3,000pcs / Box	RoHS Compliant
GSR2000	DO-204AC(DO-15)	R2000	3,000pcs / Box	RoHS Compliant
GSR2500	DO-204AC(DO-15)	R2500	3,000pcs / Box	RoHS Compliant
GSR3000	DO-204AC(DO-15)	R3000	3,000pcs / Box	RoHS Compliant
GSR4000	DO-204AC(DO-15)	R4000	3,000pcs / Box	RoHS Compliant
GSR5000	DO-204AC(DO-15)	R5000	3,000pcs / Box	RoHS Compliant