

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Component in accordance to RoHS 2011/65/EU
- High temperature soldering guaranteed: 260°C/10 seconds at terminals



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, 0.39 gram

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 by 20%.)

Parameters	Symbols	GSF 21G	GSF 22G	GSF 23G	GSF 24G	GSF 25G	GSF 26G	GSF 27G	GSF 28G	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	350	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	500	600	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length @ $T_A=55^\circ\text{C}$	$I_{(AV)}$	2.0								A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50								A
Maximum Instantaneous Forward Voltage at 2.0A	V_F	0.95			1.3		1.7			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								
Maximum Reverse Recovery Time ¹	T_{rr}	35								nS
Typical Junction Capacitance ²	C_J	40			30					PF
Typical Thermal Resistance ³	$R_{\theta JA}$	35								°C/ W
Operating Temperature Range	T_J	-55 to +150								°C
Storage Temperature Range	T_{STG}	-55 to +150								°C

Notes:

1. Reverse recovery test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$.
2. Measured at 1MHZ and applied reverse voltage of 4.0 Volts.
3. Mount on Cu-pad size 10mmx10mm on PCB.

Ratings and Characteristics Curves

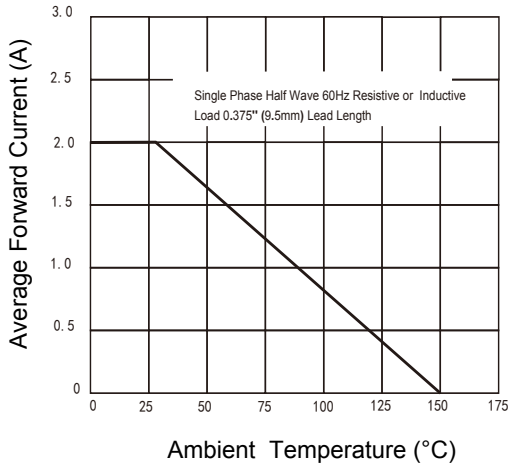


Figure 1. Maximum Average Forward Current Derating

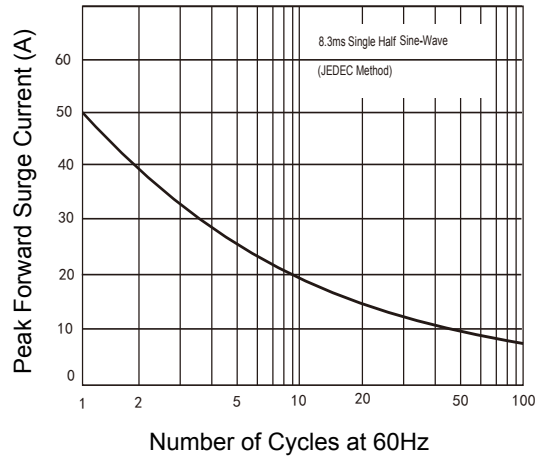


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

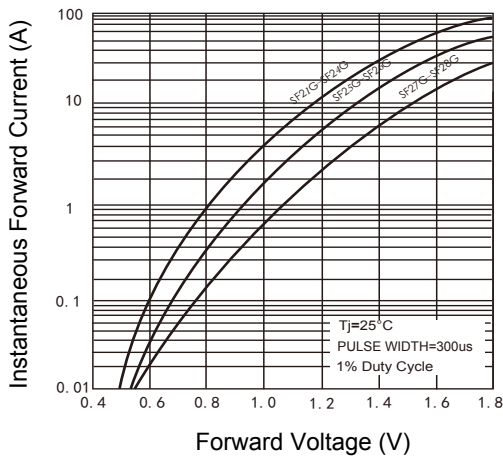


Figure 3. Typical Forward Characteristics

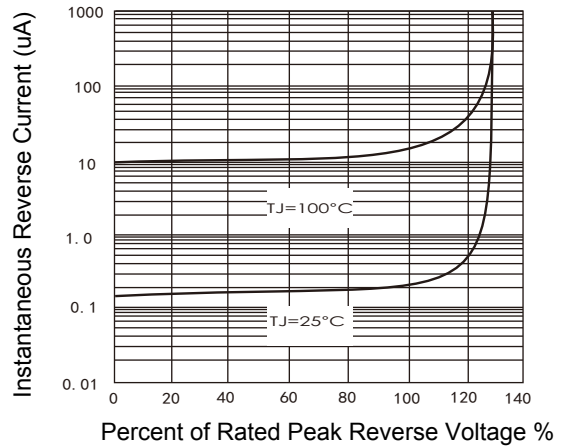


Figure 4. Typical Reverse Characteristics

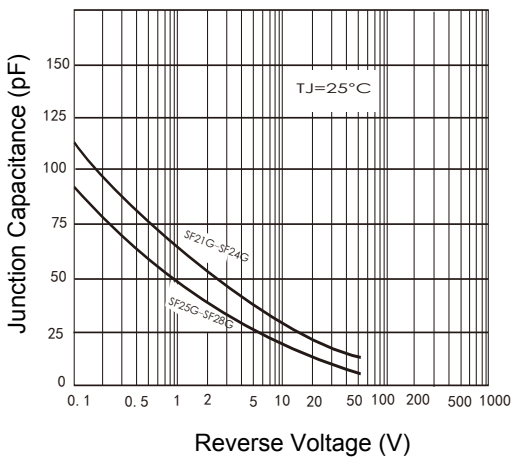
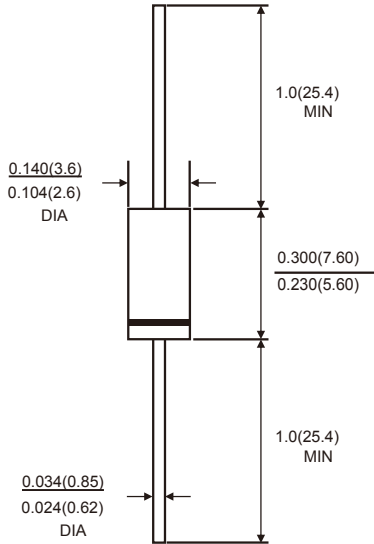


Figure 5. Typical Junction Capacitance

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



Unit in inches (millimeters)

Order Information

Device	Package	Marking	Quantity
GSF21G	DO-204AC (DO-15)	SF21G	3,000pcs / Box
GSF22G	DO-204AC (DO-15)	SF22G	3,000pcs / Box
GSF23G	DO-204AC (DO-15)	SF23G	3,000pcs / Box
GSF24G	DO-204AC (DO-15)	SF24G	3,000pcs / Box
GSF25G	DO-204AC (DO-15)	SF25G	3,000pcs / Box
GSF26G	DO-204AC (DO-15)	SF26G	3,000pcs / Box
GSF27G	DO-204AC (DO-15)	SF27G	3,000pcs / Box
GSF28G	DO-204AC (DO-15)	SF28G	3,000pcs / Box