

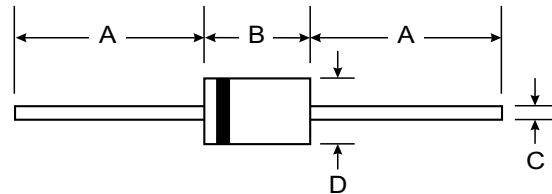
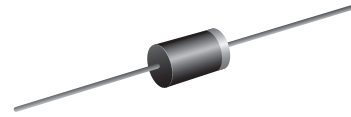
**VOLTAGE RANGE: 50 - 200V**  
**CURRENT: 5.0 A**

### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

### Mechanical Data

- Case: DO-201AD Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	FGP50B	FGP50C	FGP50D	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	150	200	Volts
Maximum RMS Voltage	$V_{RMS}$	70	105	140	Volts
Maximum DC Blocking Voltage	$V_{DC}$	100	150	200	Volts
Maximum Average Forward Current 0.375"(9.5mm) Lead Length $T_a = 55^{\circ}\text{C}$	$I_{F(AV)}$	5.0			Amps
Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$	135			Amps
Maximum Peak Forward Voltage at $I_F = 5.0\text{ A}$ .	$V_F$	0.95			Volts
Maximum DC Reverse Current $T_a = 25^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_a = 100^{\circ}\text{C}$	$I_R$	5			$\mu\text{A}$
	$I_{R(H)}$	50			$\mu\text{A}$
Maximum Reverse Recovery Time ( Note 1 )	$T_{rr}$	35			ns
Typical Junction Capacitance ( Note 2 )	$C_J$	50			pf
Junction Temperature Range	$T_J$	- 65 to + 150			$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	- 65 to + 150			$^{\circ}\text{C}$

#### 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 1.0 MHz and applied reverse voltage of 4.0 Vdc

### RATINGS AND CHARACTERISTICS CURVES FGP50B - FGP50D

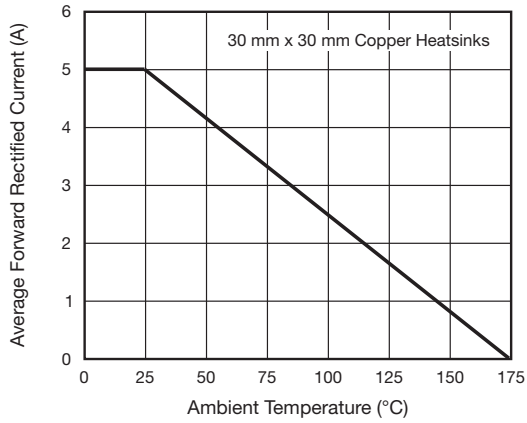


Fig. 1 - Maximum Forward Current Derating Curve

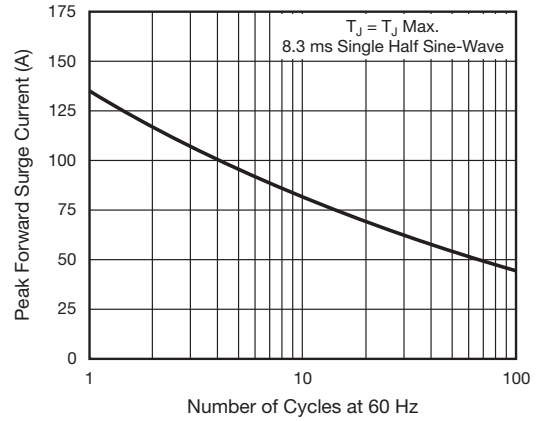


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

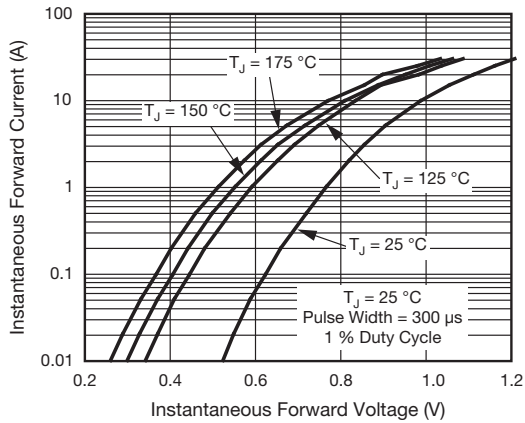


Fig. 3 - Typical Instantaneous Forward Characteristics

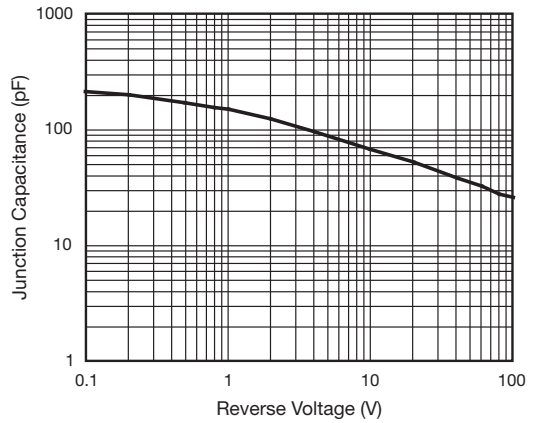


Fig. 5 - Typical Junction Capacitance

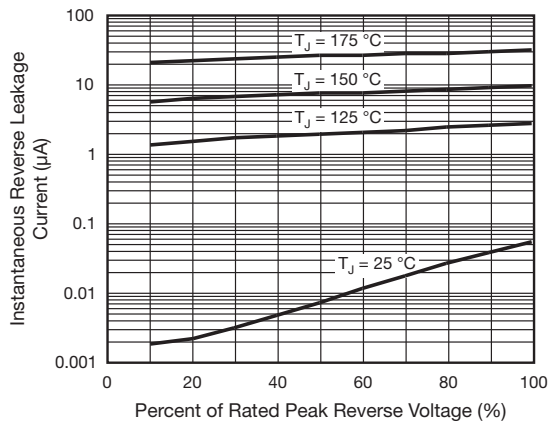


Fig. 4 - Typical Reverse Leakage Characteristics