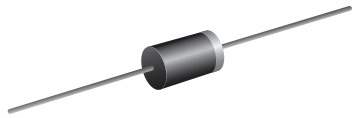
FGP50B - FGP50D

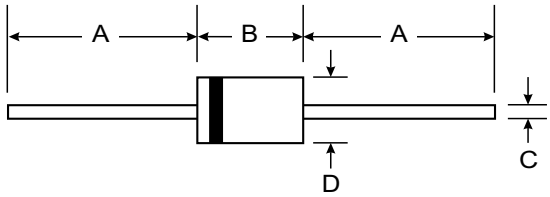
GLASS PASSIVATED ULRAFAST RECTIFIER DIODES

VOLTAGE RANGE: 100 - 200V
CURRENT: 5.0 A



Features

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



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		

Mechanical Data

- Case: D O - 2 0 1 A D 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

RoHS COMPLIANT

Maximum Ratings and Electrical Characteristics @T_A=25°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 Ta = 55 °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 A.	V_F	0.95			Volts
Maximum DC Reverse Current Ta = 25 °C	I_R	5			µA
at Rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	50			µA
Maximum Reverse Recovery Time (Note 1)	Trr	35			ns
Typical Junction Capacitance (Note 2)	C_J	50			pf
Junction Temperature Range	T_J	- 65 to + 150			°C
Storage Temperature Range	T_{STG}	- 65 to + 150			°C

Notes :

(1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, Irr = 0.25 A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 V_{DC}

RATINGS AND CHARACTERISTICS CURVES FGP50B - FGP50D

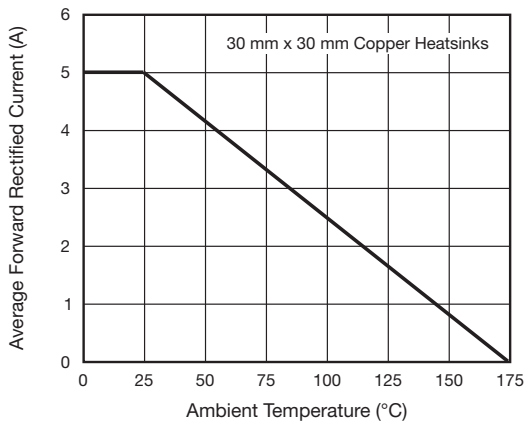


Fig. 1 - Maximum Forward Current Derating Curve

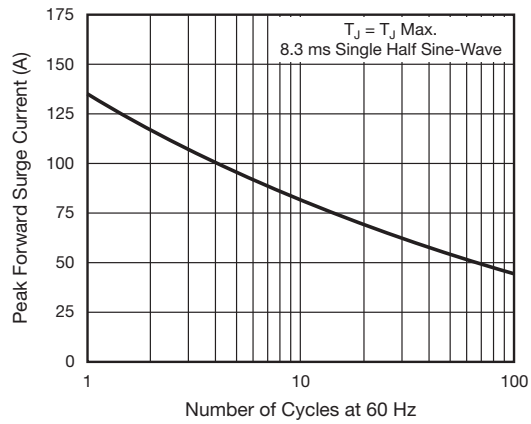


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

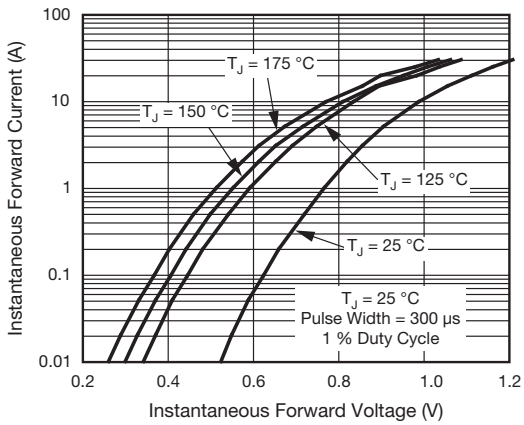


Fig. 3 - Typical Instantaneous Forward Characteristics

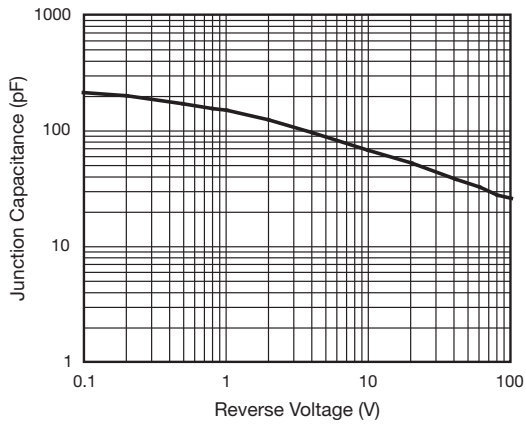


Fig. 5 - Typical Junction Capacitance

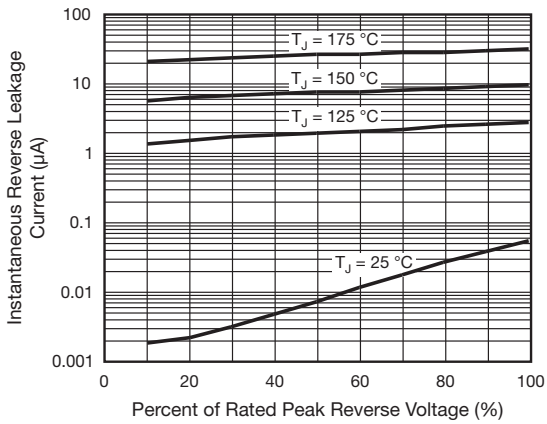


Fig. 4 - Typical Reverse Leakage Characteristics