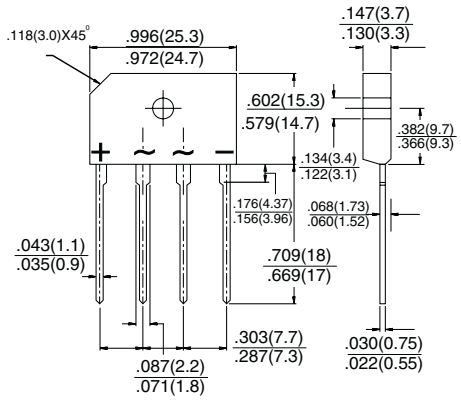
4.0 Amp. Glass Passivated Ultrafast Bridge Rectifiers

Plastic
Case



Voltage	Current
200 V to 400 V	4.0 A

- Glass passivated chip junction
- Ideal for printed circuit board
- Reliable low cost construction
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 2000 V_{RMS}
- Isolated voltage from case to lead over 2500 volts

MECHANICAL DATA

- Case: Molded plastic
- Terminals: Leads solderable per MIL-STD-750, Method 2026
- Weight: 0.15 ounce, 4 grams
- Mounting torque: 5 in. lbs. max.

Maximum Ratings and Electrical Characteristics at 25 ºC

		D4SBU 20	D4SBU 40
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	200	400
V_{RMS}	Maximum RMS Voltage (V)	140	280
V_{DC}	Maximum DC Blocking Voltage (V)	200	400
$I_{F(AV)}$	Maximum Average Forward Rectified Current See Fig.	4.0 A	
I_{FSM}	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	150 A	
Trr	Maximum Reverse Recovery Time (Note 1)	35 ns	50 ns
T_j	Operating Temperature Range	-55 to +150 °C	
T_{stg}	Storage Temperature Range	-55 to +150 °C	

Electrical Characteristics at Tamb = 25 °C

V_F	Maximum Instantaneous Forward Voltage @ = 4.0 A	0.98 V	1.3 V
I_R	Maximum DC Reverse Current @ T_A = 25 °C at Rated DC Blocking Voltage @ T_A =125°C	5.0 µA 500 µA	
$R_{th\ (j-c)}$	Typical Thermal Resistance (Note 2)	5.5 °C/W	

Notes: 1. Reverse Recovry Test Conditions: I_F = 0.5A, I_R = 1.0A, I_{RR}=0.25A.
2. Thermal Resistance from Junction to Case with Device Mounted on 2" x 3" x 0.25" Al-Plate Heatsink.

Rating And Charasterictic Curves

TSS4B01G

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

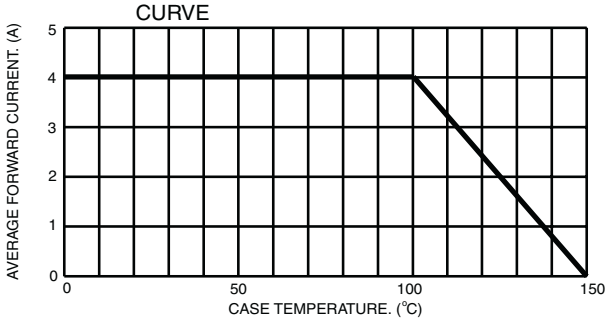


FIG.2- TYPICAL FORWARD CHARACTERISTICS

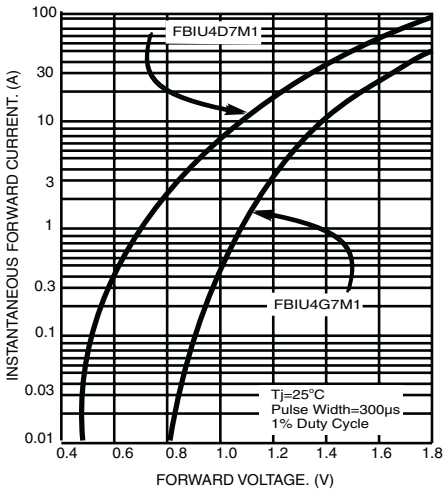


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

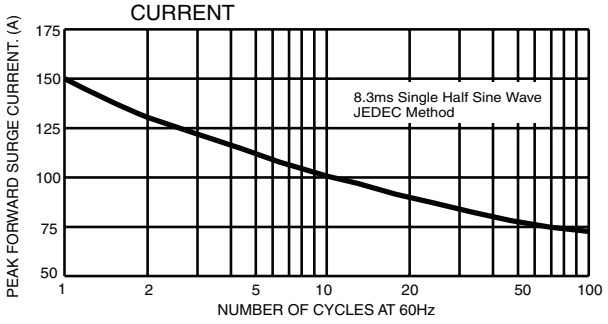


FIG.5- TYPICAL REVERSE CHARACTERISTICS

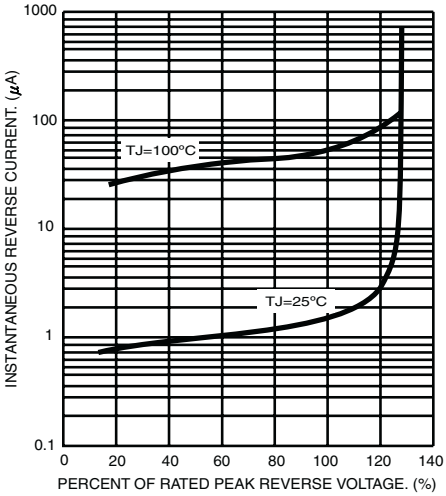


FIG.4- TYPICAL JUNCTION CAPACITANCE

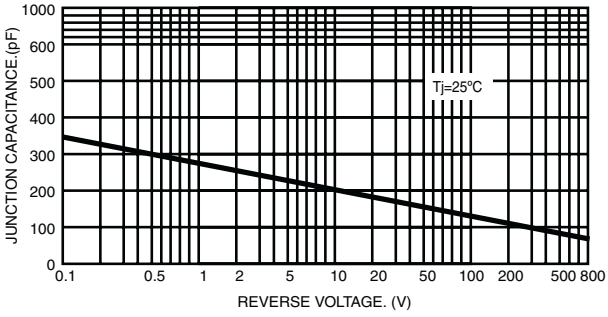


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM