

### Surface Mount Glass Passivated Junction Rectifier (Discontinued)

#### Features

- Plastic package has Underwriters Laboratory Flammability 94V-0
- Ideal for surface mount automotive applications
- High temperature metallurgically bonded construction
- Capable of meeting environmental standards of MIL-S-19500
- Glass passivated cavity-free junction
- Built-in strain relief
- Easy pick and place
- High temperature soldering guaranteed:  
450°C/5 seconds at terminals  
Complete device submersible temperature of 265°C for 10 seconds in solder bath



**DO-214BA**

#### Mechanical Data

<b>Case:</b>	JEDEC DO-214BA molded plastic over glass body
<b>Terminals:</b>	Plated axial leads, solderable per MIL-STD-750, Method 2026
<b>Polarity:</b>	Color band denotes cathode end
<b>Mounting Position:</b>	Any
<b>Weight:</b>	0.0048 ounce, 0.120 gram

#### Maximum Ratings and Electrical Characteristics ( $T_A=25^\circ\text{C}$ unless noted otherwise)

Symbol	Description	GF1B	GF1D	GF1G	GF1M	Unit	Conditions
	Device Marking Code	GB	GD	GG	GM		
<b>VRRM</b>	Maximum Repetitive Peak Reverse Voltage	100	200	400	1000	V	
<b>VRMS</b>	Maximum RMS Voltage	70	140	280	700	V	
<b>VDC</b>	Maximum DC Blocking Voltage	100	200	400	1000	V	
<b>IF(AV)</b>	Maximum Average Forward Rectified Current	1.0				A	
<b>IFSM</b>	Peak Forward Surge Current	30.0				A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)

## General Semiconductor

Symbol	Description	GF1B	GF1D	GF1G	GF1M	Unit	Conditions
<b>V<sub>F</sub></b>	Maximum Instantaneous Forward Voltage	1.1	1.1	1.1	1.2	V	I <sub>F</sub> =1.0A,
<b>I<sub>R</sub></b>	Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0				μA	T <sub>A</sub> =25°C
		50.0					T <sub>A</sub> =125°C
<b>T<sub>rr</sub></b>	Typical Reverse Recovery Time	2.0				μs	Note 1
<b>C<sub>J</sub></b>	Typical Junction Capacitance	15.0				pF	Note 2
<b>R<sub>thJA</sub></b>	Typical Thermal Resistance	80.0				°C / W	Note 3
<b>R<sub>thJT</sub></b>		26.0					
<b>T<sub>J</sub>, T<sub>STG</sub></b>	Operating Junction and Storage Temperature Range	-65 to +175				°C	

**Notes:**

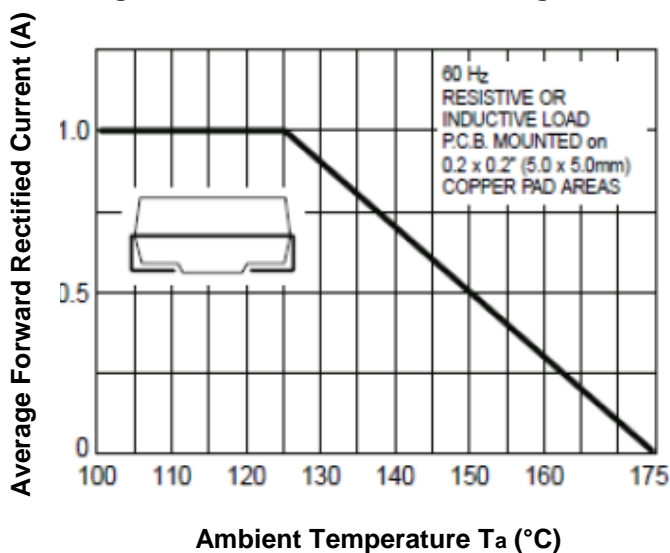
1: Reverse recovery test condition: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A.

2: Measured at 1.0MHz and applied reverse voltage of 4.0V

3: Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2x0.2" (5.0x5.0mm) copper pad areas

### Typical Characteristics Curves *(T<sub>A</sub>=25°C unless noted otherwise)*

**Fig.1-Max. Forward Current Derating Curve**



**Fig.2-Max. Non-Repetitive Peak Forward Surge Current**

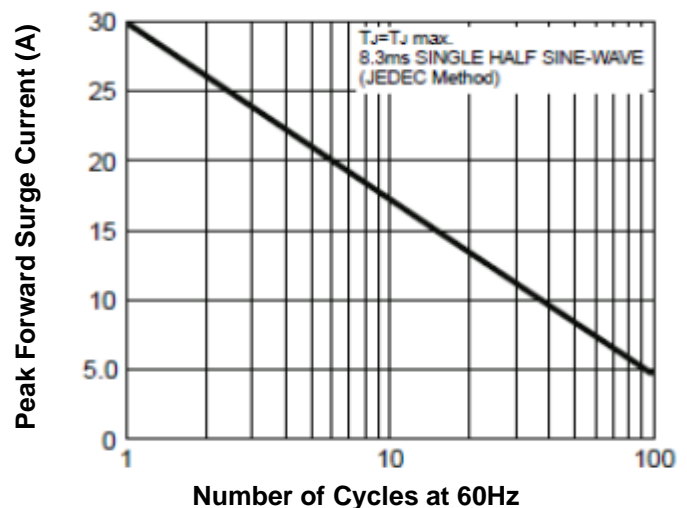


Fig.3- Typical Instantaneous Forward Characteristics

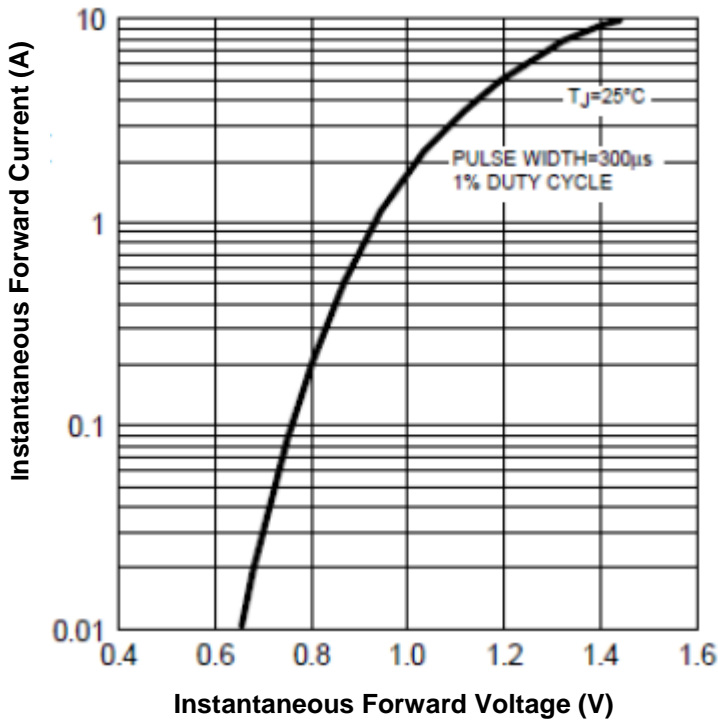


Fig.4-Typical Reverse Characteristics

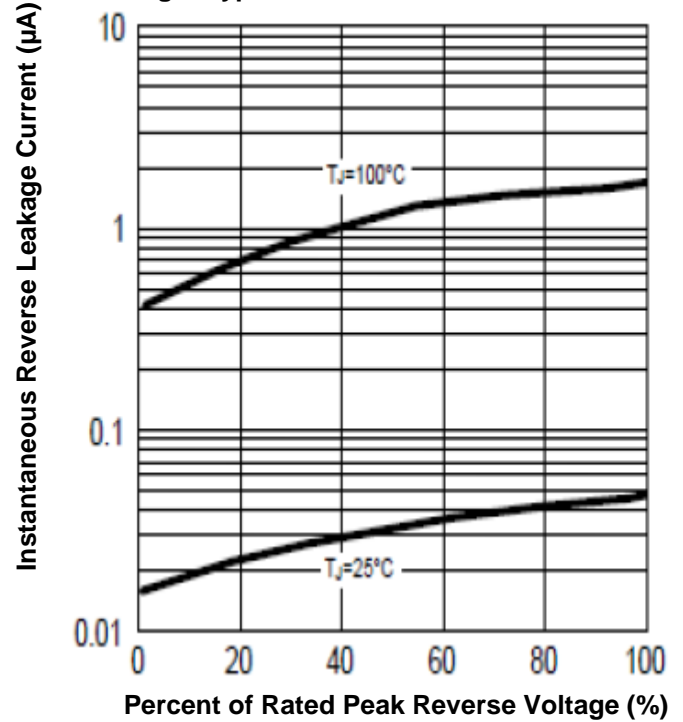


Fig.5- Typical Junction Capacitance

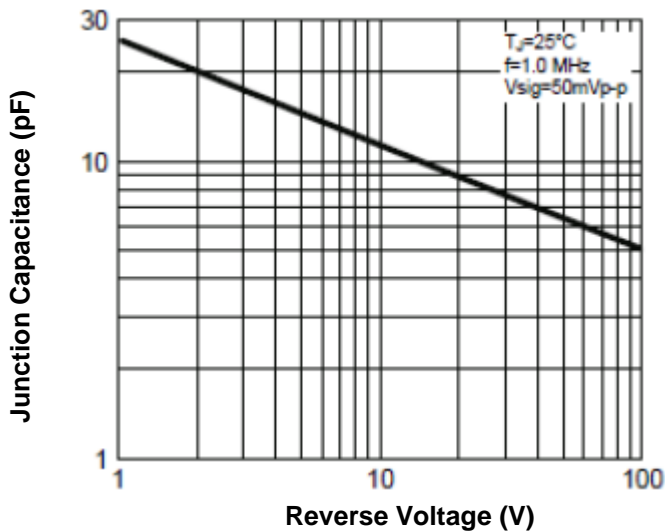
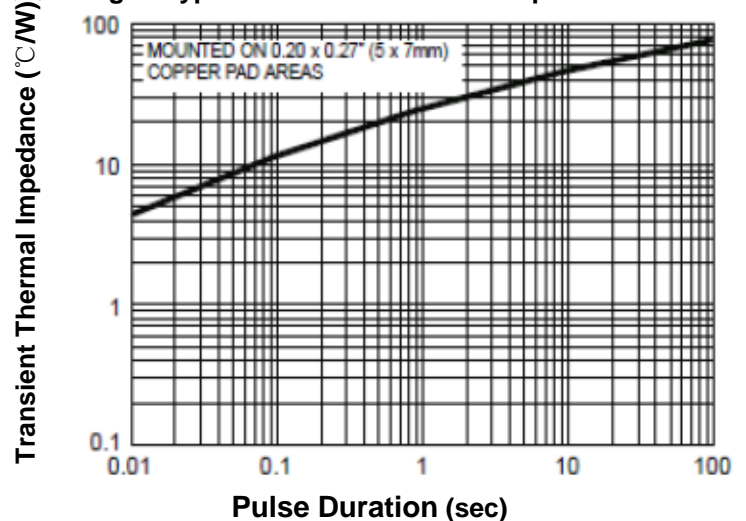
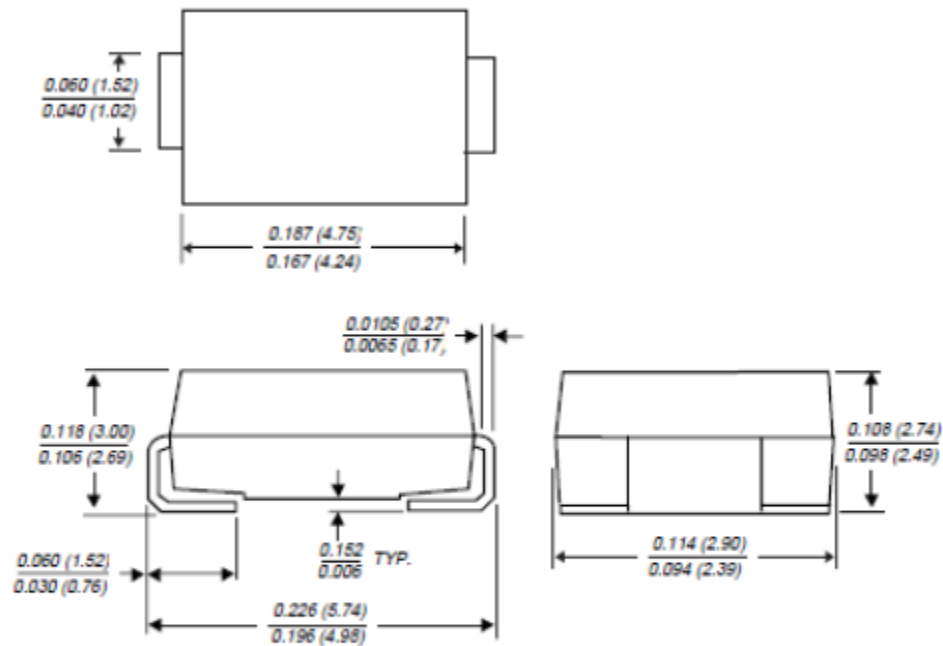


Fig. 6-Typical Transient Thermal Impedance



### Dimensions in inch (mm)



DD-214BA

### Order Information

Part # to order	Manufacturer	Outline	Packing	RoHS Status
GF1B/17-GSI-T70	General Semiconductor	DO-214BA	7" Tape and Reel	NO
GF1D/17-GSI-T70	General Semiconductor	DO-214BA	7" Tape and Reel	NO
GF1G/17-GSI-T70	General Semiconductor	DO-214BA	7" Tape and Reel	NO
GF1M/17-GSI-T70	General Semiconductor	DO-214BA	7" Tape and Reel	NO

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