

## 1.0A Surface Mount Sintered Glass Passivated Rectifier

### Features

- Low profile surface mounted package
- Sintered glass passivated cavity-free junction
- Plastic package has underwriters laboratory flammability classification 94V-0
- High temperature soldering: 260 °C / 10 seconds at terminals
- RoHS compliant



SMA



### Mechanical Data

<b>Case:</b>	JEDEC DO-214AC molded plastic
<b>Terminals:</b>	Solder plated solderable per MIL-STD-750, Method 2026
<b>Polarity:</b>	Cathode end indicated by color band
<b>Weight:</b>	0.002 Ounce, 0.064 gram

### Maximum Ratings & Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted)

Symbol	Description	GF 1A	GF 1B	GF 1D	GF 1G	GF 1J	GF 1K	GF 1M	Unit	Conditions	
<b>V<sub>RRM</sub></b>	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V		
<b>V<sub>RMS</sub></b>	Maximum RMS Voltage	35	70	140	280	420	560	700	V		
<b>V<sub>DC</sub></b>	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V		
<b>I<sub>F(AV)</sub></b>	Maximum Average Forward Rectified Current	1.0								A	
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	30								A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
<b>V<sub>F</sub></b>	Maximum Instantaneous Forward Voltage	1.0								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	
		30								T <sub>A</sub> =125° C	
		50								T <sub>A</sub> =150° C	
<b>C<sub>J</sub></b>	Typical Junction Capacitance	12								pF	V <sub>R</sub> =4V, f=1MHz

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## GF1A - GF1M

Symbol	Description	GF 1A	GF 1B	GF 1D	GF 1G	GF 1J	GF 1K	GF 1M	Unit	Conditions
RthJA	Typical Thermal Resistance	75							°C / W	Note
RthJL		27								
TJ, Tstg	Operating Junction and Storage Temperature Range	-65 to +175							°C	

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

### Typical Characteristics Curves

Fig.1- Forward Current Derating Curve

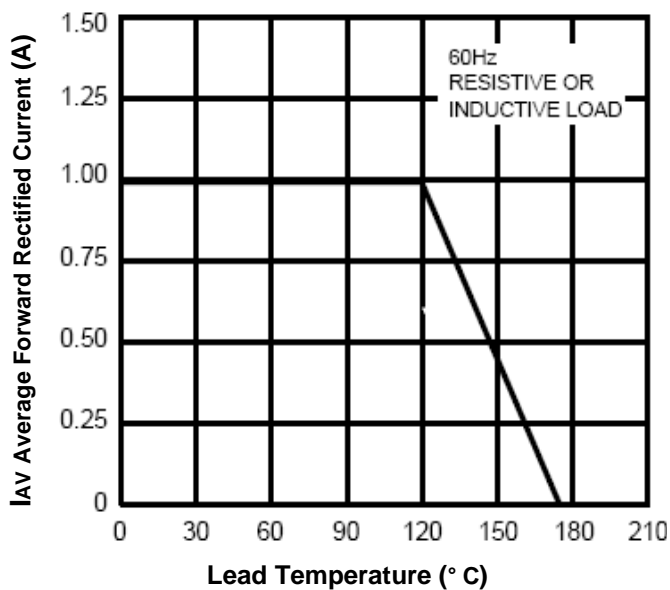
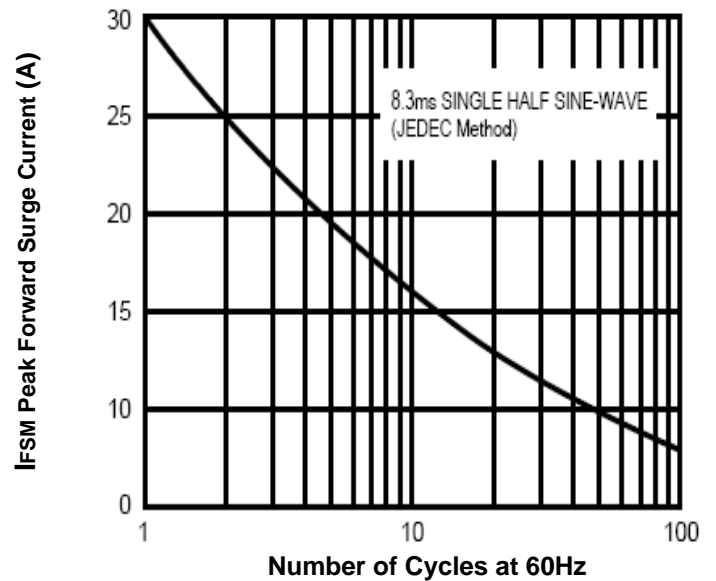


Fig.2- Max. Non-Repetitive Peak Forward Surge Current



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## GF1A - GF1M

Fig.3- Typical Instantaneous Forward Characteristics

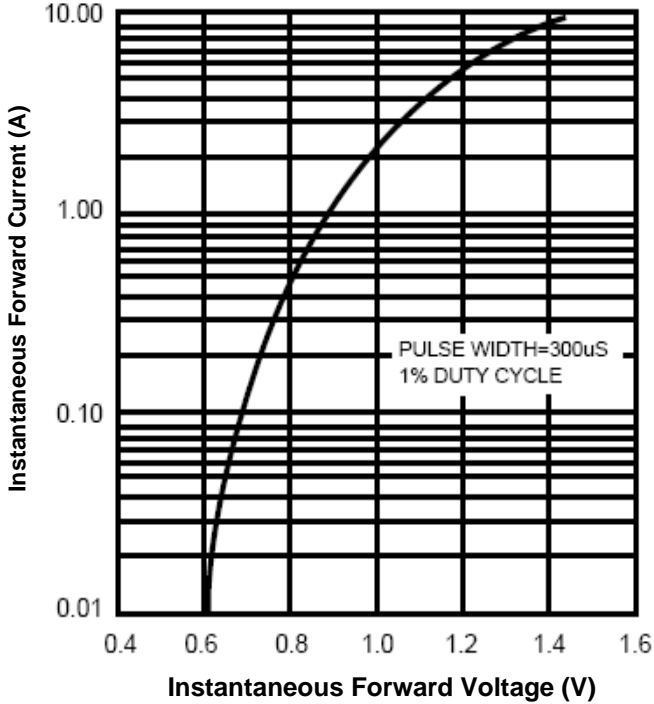


Fig.4- Typical Reverse Characteristics

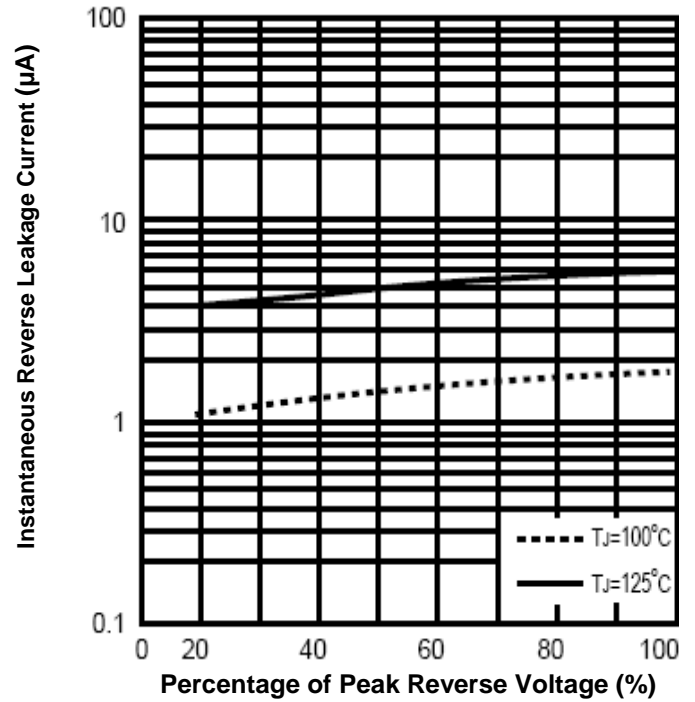
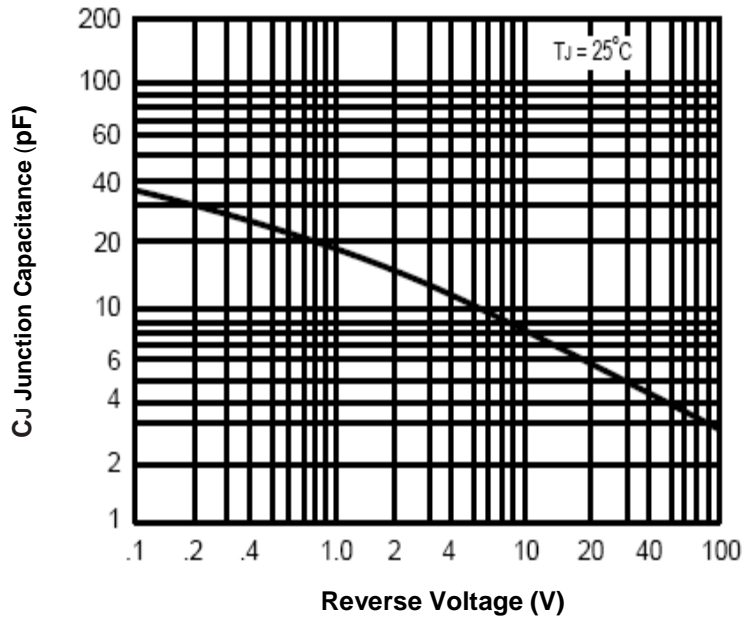


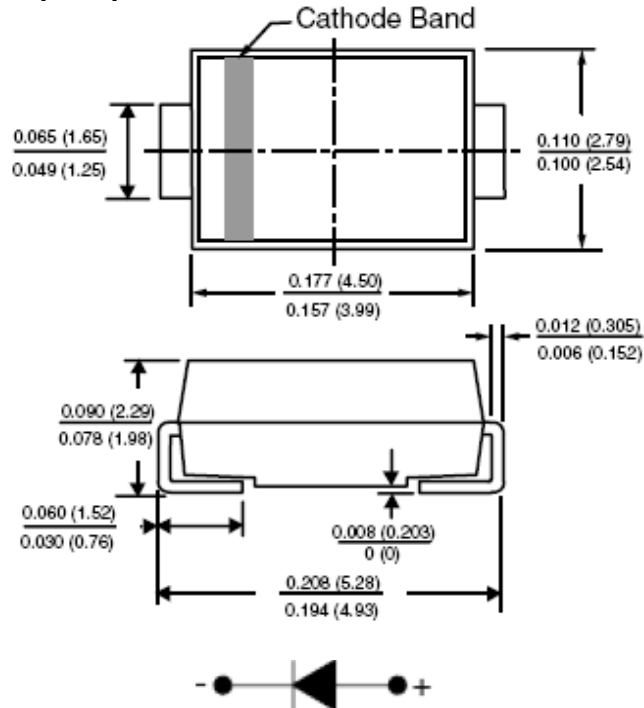
Fig.5- Junction Capacitance



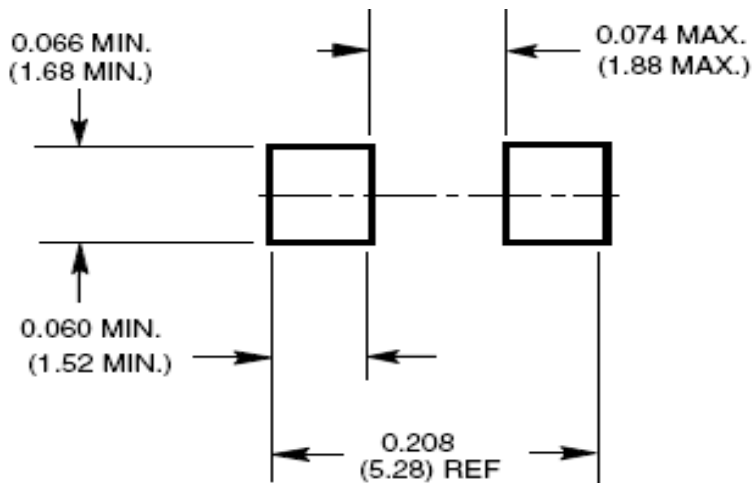
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## Dimensions in inch (mm)



## Soldering Pad in inch (mm)



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**TAITRON**  
components incorporated

Rev. D/AH 2008-01-17

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