

## 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 1Q	GF 1V	GF 1W	GF 1Y	GF 1Z	GF 1MM	Unit	Conditions
<b>VRRM</b>	Maximum Repetitive Peak Reverse Voltage	1200	1400	1500	1600	1800	2000	V	
<b>VRMS</b>	Maximum RMS Voltage	840	980	1050	1120	1260	1400	V	
<b>VDC</b>	Maximum DC Blocking Voltage	1200	1400	1500	1600	1800	2000	V	
<b>IF(AV)</b>	Maximum Average Forward Rectified Current	1.0						A	
<b>IFSM</b>	Peak Forward Surge Current	25						A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
<b>VF</b>	Maximum Instantaneous Forward Voltage	1.25				2.0		V	IF=1.0A
<b>IR</b>	Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0						μA	TA=25° C
		50							TA=125° C
<b>CJ</b>	Typical Junction Capacitance	12						pF	VR=4V, f=1MHz

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## GF1Q - GF1MM

Symbol	Description	GF 1Q	GF 1V	GF 1W	GF 1Y	GF 1Z	GF 1MM	Unit	Conditions
RthJA	Typical Thermal Resistance	75						°C / W	Note
RthJL		27							
TJ, Tstg	Operating Junction and Storage Temperature Range	-55 to +150						°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

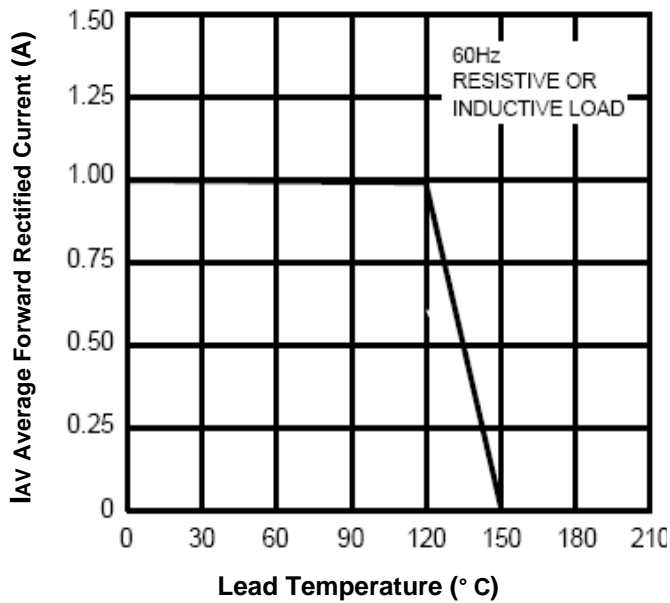
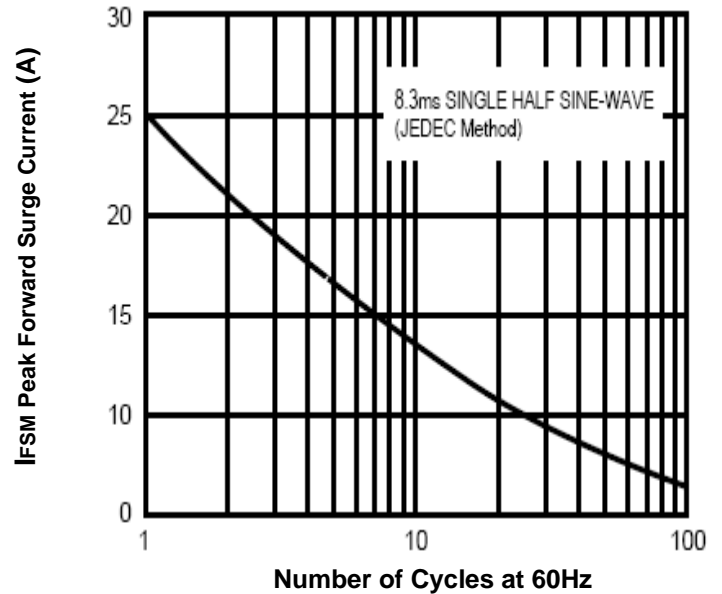


Fig.2- Max. Non-Repetitive Peak Forward Surge Current



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## GF1Q - GF1MM

Fig.3- Typical Instantaneous Forward Characteristics

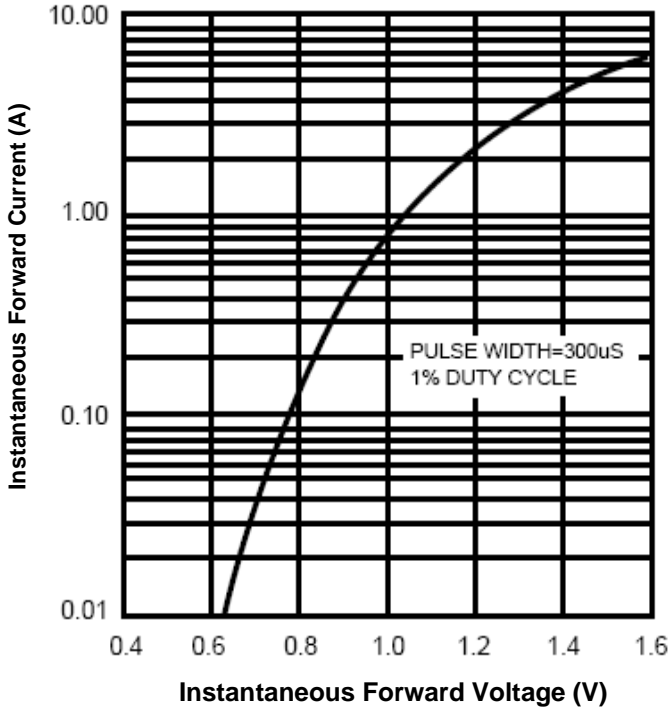


Fig.4- Typical Reverse Characteristics

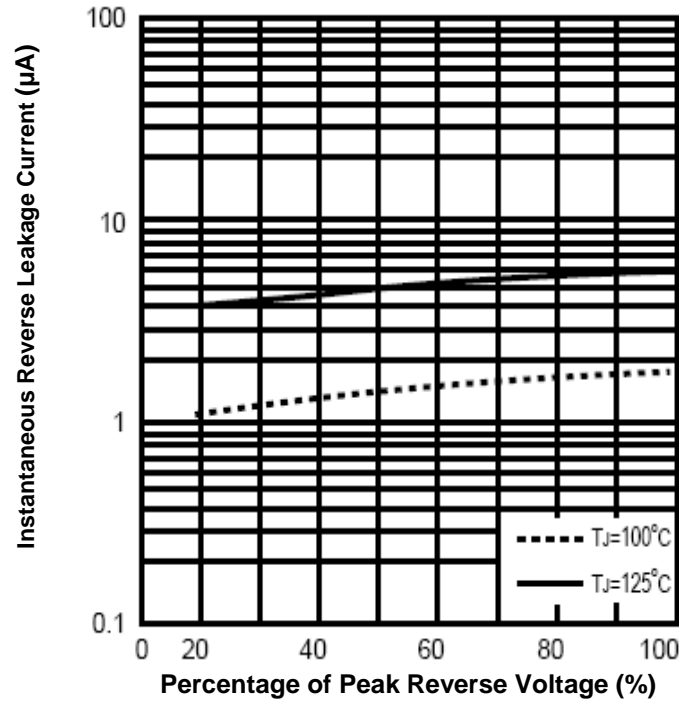
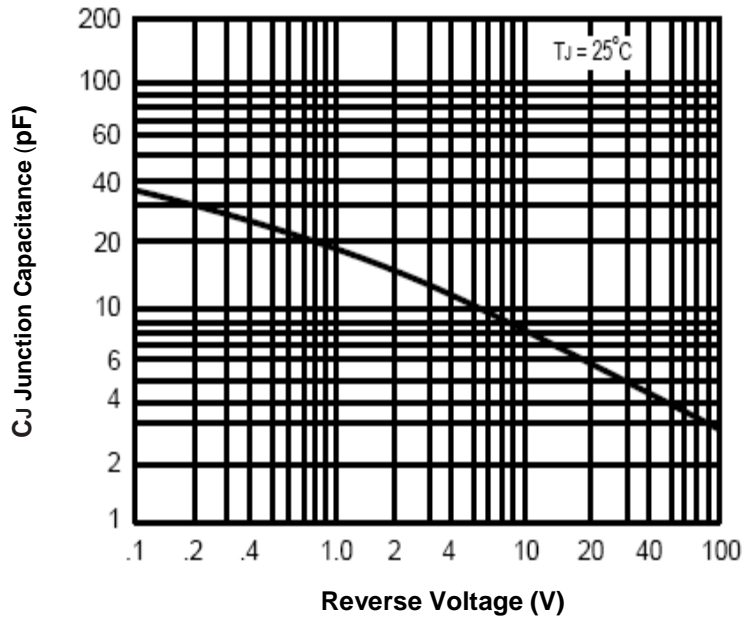


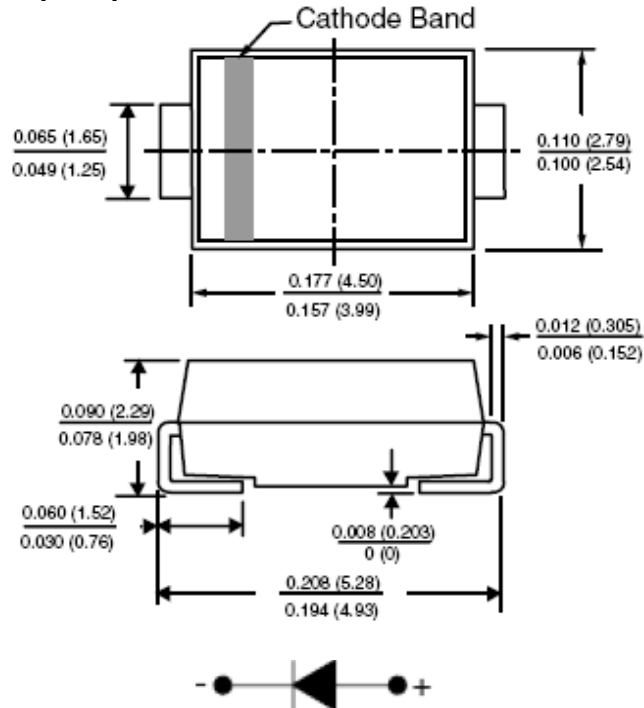
Fig.5- Junction Capacitance



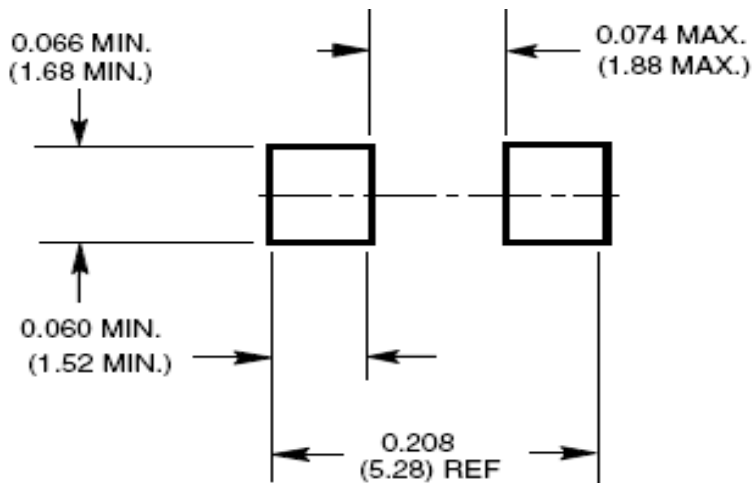
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## Dimensions in inch (mm)



## Soldering Pad in inch (mm)



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**TAITRON**  
components incorporated

Rev. D/AH 2008-01-17

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GF1Q - GF1MM

## How to contact us:

### US HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 824-8766 (661) 257-6060

Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415

Email: [taitron@taitroncomponents.com](mailto:taitron@taitroncomponents.com)

Http://[www.taitroncomponents.com](http://www.taitroncomponents.com)

### TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P.  
42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

### TAITRON COMPONENTS INCORPORATED REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL

Tel: +55-11-5574-7949

Fax: +55-11-5572-0052

### TAITRON COMPONENTS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

METROBANK PLAZA, 1160 WEST YAN' AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-5424-9931