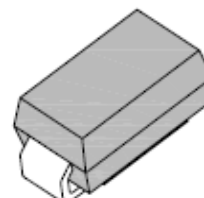


## 1.0A Sintered Glass Passivated Ultra Fast Rectifier

### Features

- Sintered glass passivated (SGP) rectifier chip
- Glass passivated cavity-free junction
- Ideal for surface mount automotive applications
- Superfast recovery time for high efficiency
- Built-in strain relief
- Easy pick and place
- High temperature soldering guaranteed: 260°C/10 seconds, at terminals
- RoHS Compliance



SMA



### Mechanical Data

<b>Case:</b>	JEDEC DO-214AC(SMA) molded plastic over passivated chip
<b>Epoxy:</b>	Plastic package has UL flammability classification 94V-0
<b>Terminals:</b>	Tin plated, solderable per MIL-STD-750, Method 2026
<b>Polarity:</b>	Color band denotes cathode end
<b>Weight:</b>	0.002 ounces, 0.064 gram

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

Symbol	Description	UGF1A	UGF1B	UGF1D	UGF1G	UGF1J	UGF1K	UGF1M	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	TL=75° C
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	30							A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)

# 1.0A Sintered Glass Passivated Ultra Fast Rectifier

## UGF1A - UGF1M

Symbol	Description	UGF1A	UGF1B	UGF1D	UGF1G	UGF1J	UGF1K	UGF1M	Unit	Conditions	
<b>V<sub>F</sub></b>	Maximum Instantaneous Forward Voltage	1.0			1.25	1.7			V	I <sub>F</sub> =1.0A	
<b>I<sub>R</sub></b>	Maximum DC Reverse Current at Rated DC Blocking Voltage	5				5				μA	TA=25° C
		30				50					TA=125° C
		50				-					TA=150° C
<b>T<sub>rr</sub></b>	Maximum Reverse Recovery Time	50				75				nS	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A
<b>C<sub>J</sub></b>	Typical Junction Capacitance	15								pF	V <sub>R</sub> =4V, f=1MHz
<b>R<sub>thJA</sub></b>	Typical Thermal Resistance	75								°C / W	Note
<b>R<sub>thJL</sub></b>		25									
<b>T<sub>J</sub>, T<sub>STG</sub></b>	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" (5.0x5.0mm) copper pad areas.

### Typical Characteristics Curves

Fig.1- Forward Current Derating Curve

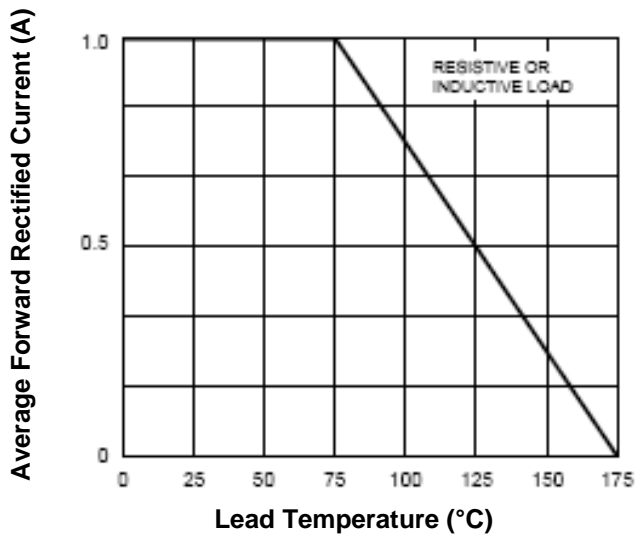
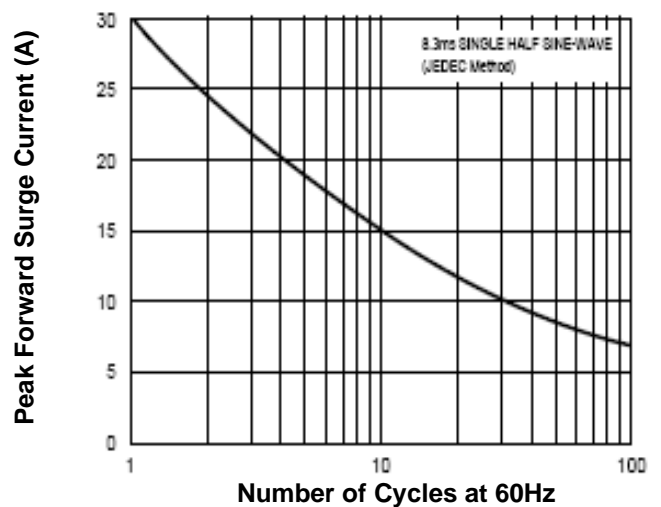


Fig.2- Max. Non-Repetitive Peak Forward Surge Current



# 1.0A Sintered Glass Passivated Ultra Fast Rectifier

## UGF1A - UGF1M

Fig.3- Typical Instantaneous Forward Characteristics

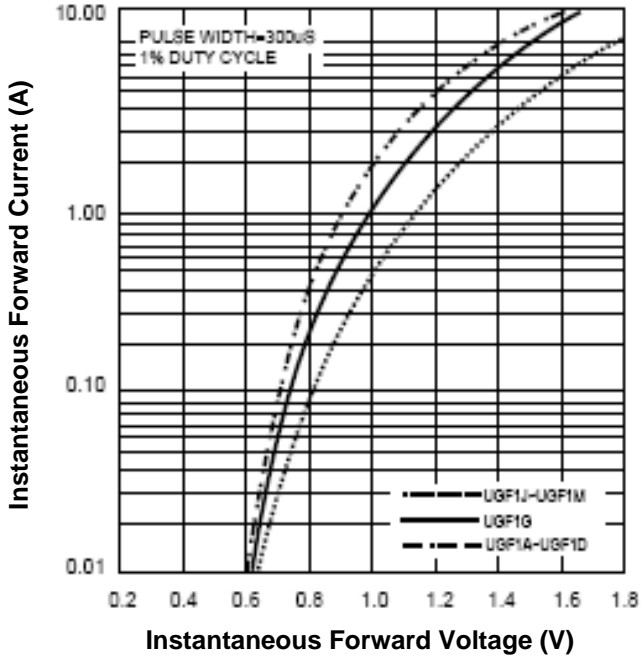


Fig.4-Typical Reverse Characteristics

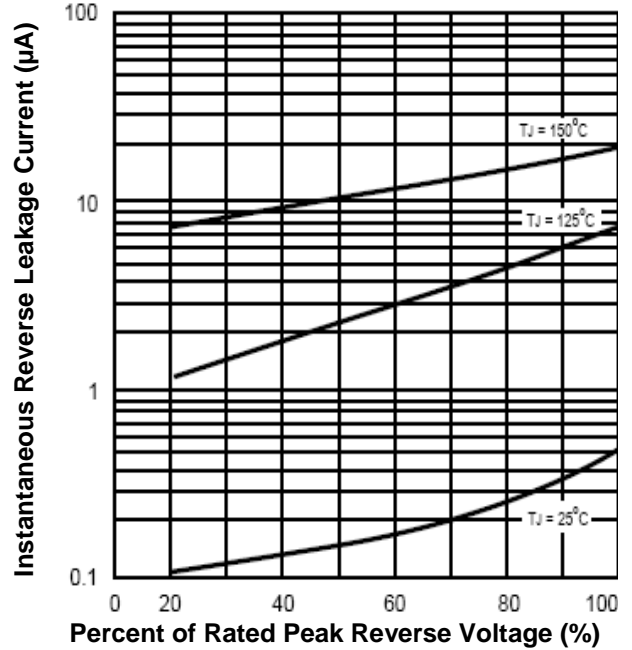
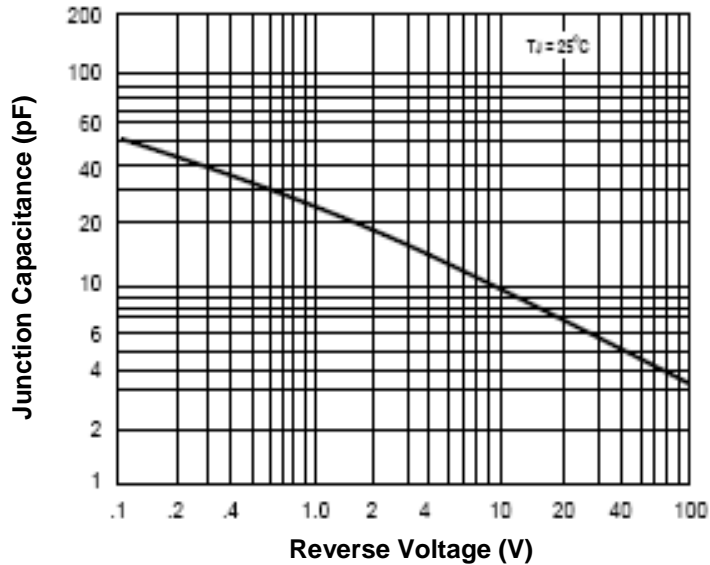


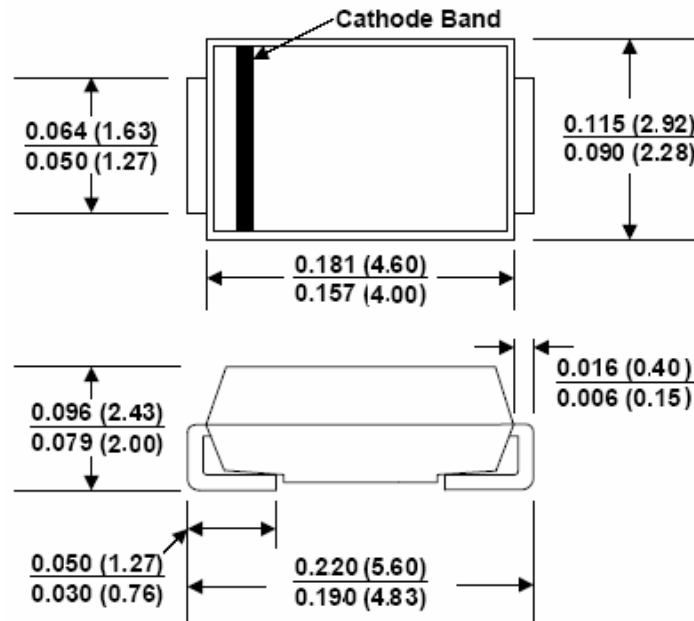
Fig.5- Typical Junction Capacitance



# 1.0A Sintered Glass Passivated Ultra Fast Rectifier

## UGF1A - UGF1M

### Dimensions in inches (mm)



SMA

### 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 COMPONETS INCORPORATED E 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 COMPONETS 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