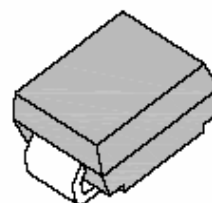


3.0A Sintered Glass Passivated Ultra Fast Rectifier

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



SMB



Mechanical Data

Case:	JEDEC DO-214AA(SMB) molded plastic over passivated chip
Epoxy:	Plastic package has UL flammability classification 94V-0
Terminals:	Solder plated, solderable per MIL-STD-750, Method 2026
Polarity:	Color band denotes cathode end
Weight:	0.003 ounces, 0.093 gram

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

Symbol	Description	UGF3 AB	UGF3 BB	UGF3 DB	UGF3 GB	UGF3 JB	UGF3 KB	UGF3 MB	Unit	Conditions
VRRM	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
VRMS	Maximum RMS Voltage	35	70	140	280	420	560	700	V	
VDC	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
IF(AV)	Maximum Average Forward Rectified Current	3.0							A	$T_A=75^{\circ}\text{C}$
IFSM	Peak Forward Surge Current	115				105			A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)

3.0A Sintered Glass Passivated Ultra Fast Rectifier

UGF3AB - UGF3MB

Symbol	Description	UGF3 AB	UGF3 BB	UGF3 DB	UGF3 GB	UGF3 JB	UGF3 KB	UGF3 MB	Unit	Conditions
V_F	Maximum Instantaneous Forward Voltage	1.0			1.25	1.7			V	I _F =1.0A
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage	5			5			μA		T _A =25° C
		50			120					T _A =125° C
		120			-					T _A =150° C
T_{rr}	Maximum Reverse Recovery Time	50			75			nS	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	
C_J	Typical Junction Capacitance	75							pF	V _R =4V, f=1MHz
R_{thJA}	Typical Thermal Resistance	47							°C / W	Note
R_{thJL}		12								
T_J, T_{STG}	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

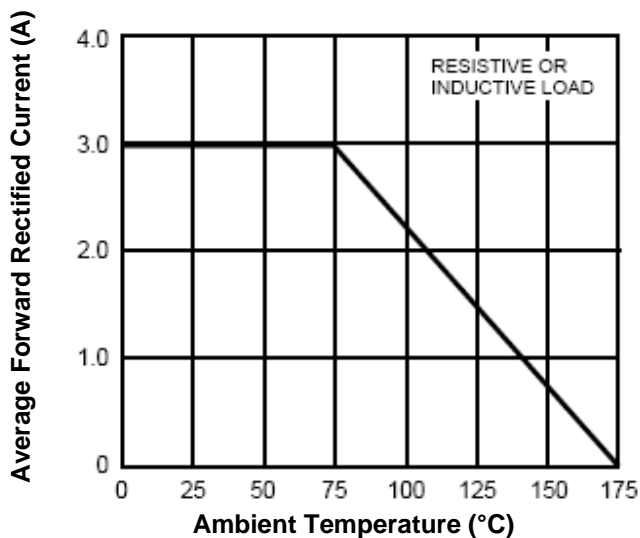
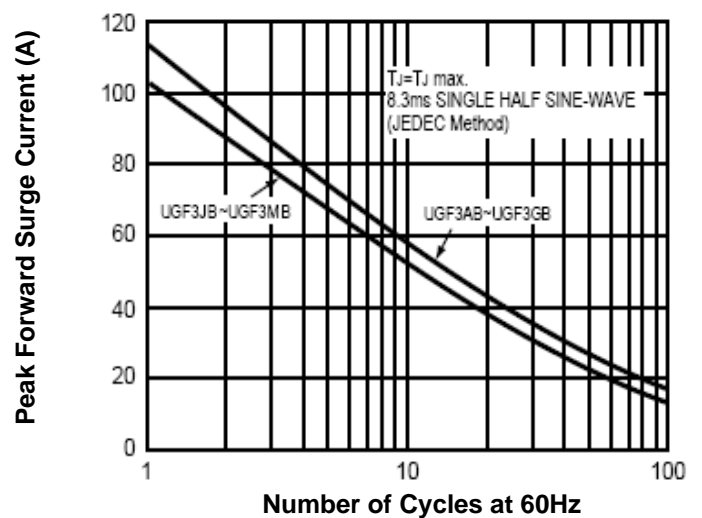


Fig.2- Max. Non-Repetitive Peak Forward Surge Current



3.0A Sintered Glass Passivated Ultra Fast Rectifier

UGF3AB - UGF3MB

Fig.3- Typical Instantaneous Forward Characteristics

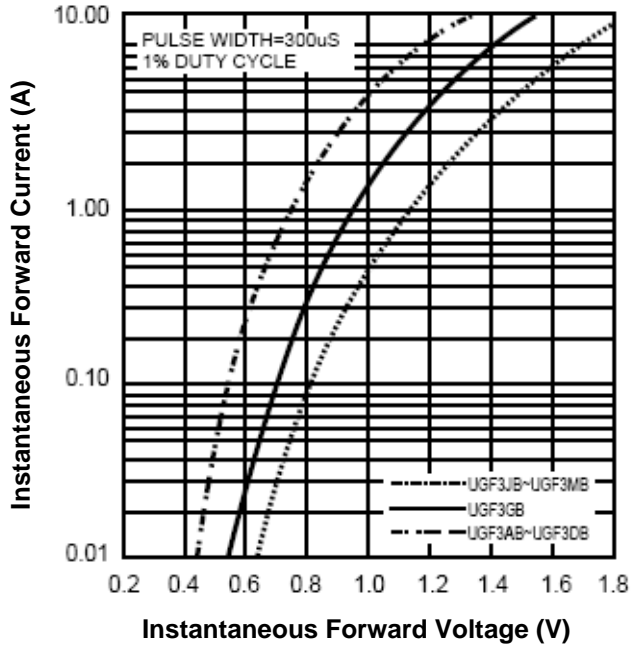


Fig.4-Typical Reverse Characteristics

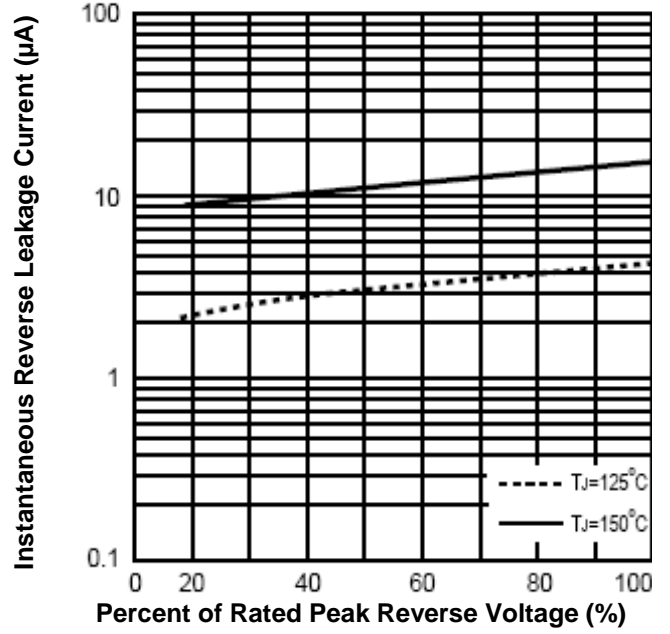
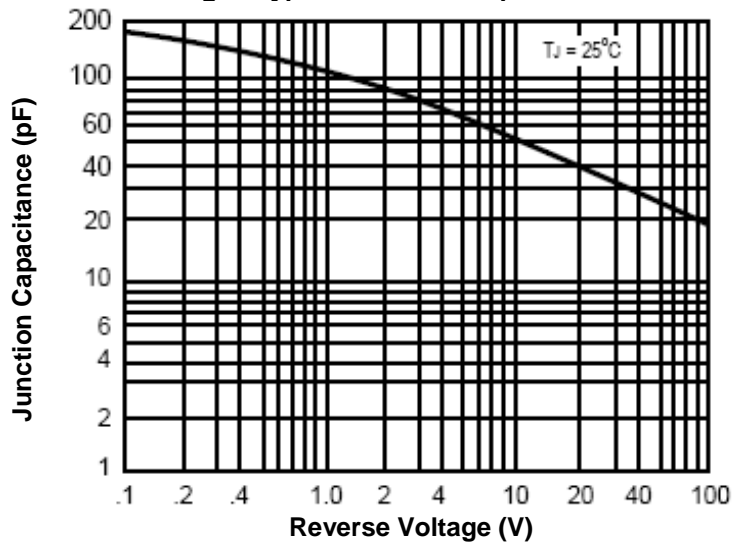


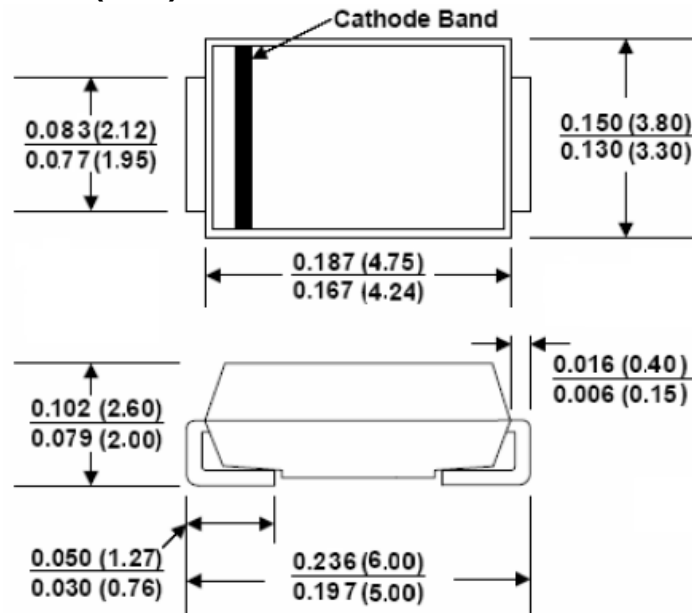
Fig.5- Typical Junction Capacitance



3.0A Sintered Glass Passivated Ultra Fast Rectifier

UGF3AB - UGF3MB

Dimensions in inches (mm)



SMB

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

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