

# UG5F

## SUPERFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 300V

CURRENT: 5.0A

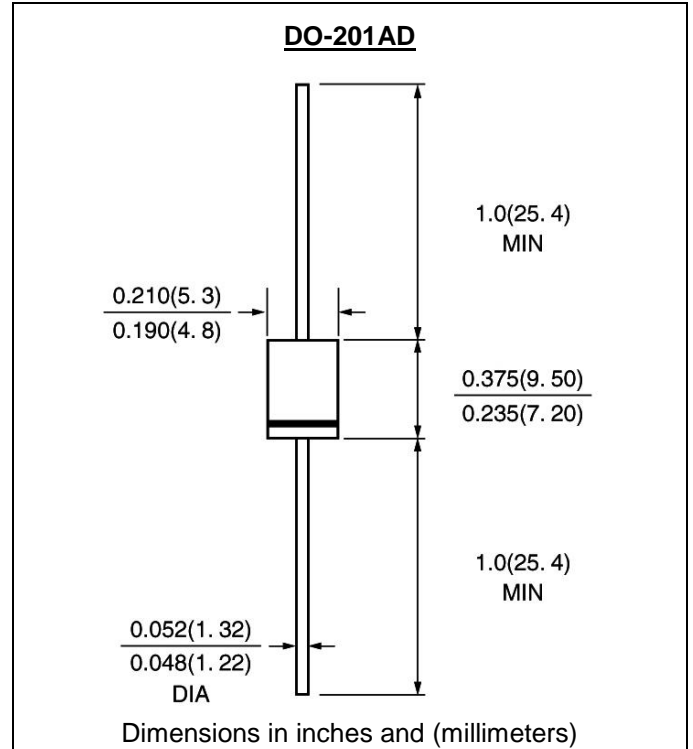


### FEATURE

Low power loss  
High surge capability  
Glass passivated chip junction  
Super-fast recovery time for high efficiency  
High temperature soldering guaranteed: 260°C/10sec

### MECHANICAL DATA

Terminal: Plated axial leads solderable per J-STD-002  
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: color band denotes cathode  
Mounting position: any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

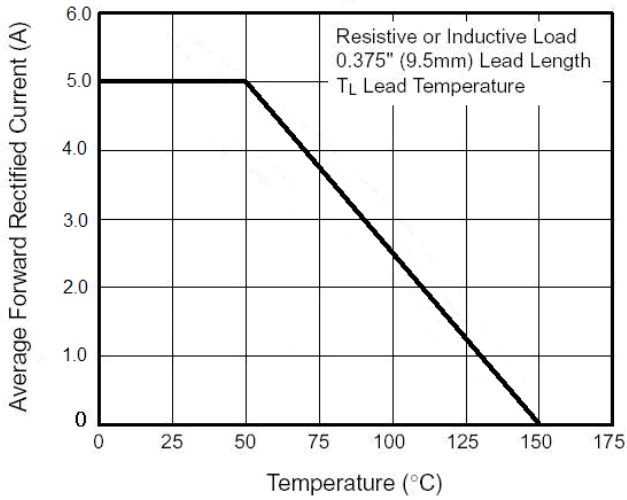
	Symbol	UG5F	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	300	V
Maximum RMS Voltage	V <sub>rms</sub>	210	V
Maximum DC blocking Voltage	V <sub>dc</sub>	300	V
Maximum Average Forward Rectified Current 3/8"lead length	I <sub>f(av)</sub>	5.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	150	A
Maximum Forward Voltage at rated Forward current	V <sub>f</sub>	1.0	V
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	5.0 250	μA
Maximum Reverse Recovery Time	T <sub>rr</sub>	25	nS
Typical Junction Capacitance	C <sub>j</sub>	26	pF
Typical Thermal Resistance	R <sub>th(jl)</sub>	18	°C/W
Storage and Operating Junction Temperature	T <sub>stg,Tj</sub>	-55 to +150	°C

Note:

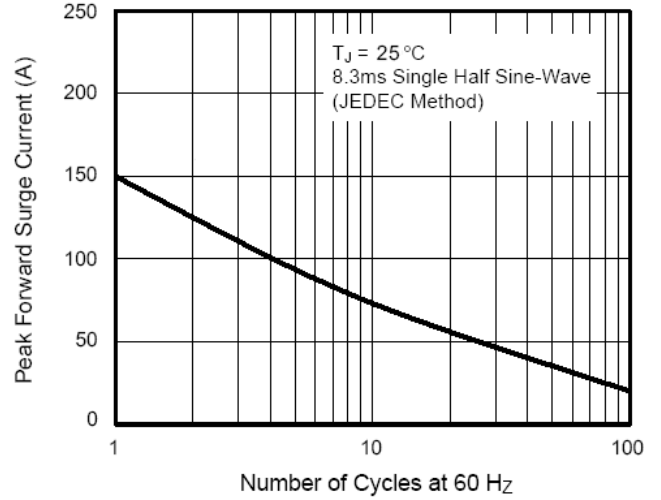
- Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES UG5F

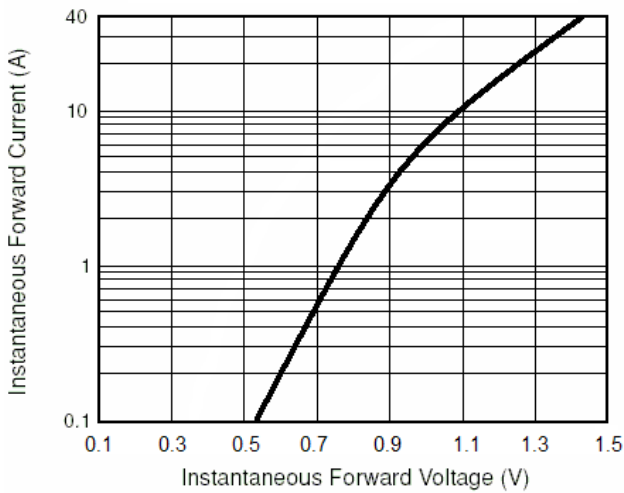
**Fig. 1 – Forward Current Derating Curves**



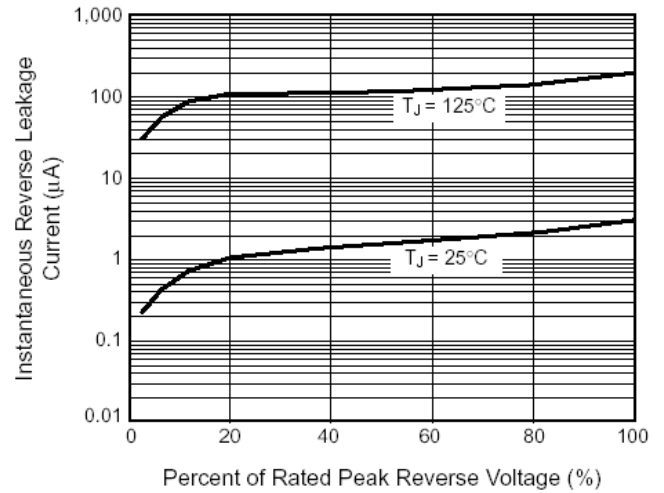
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg**



**Fig. 3 – Typical Instantaneous Forward Characteristics**



**Fig. 4 – Typical Reverse Leakage Characteristics**



**Fig. 5 – Typical Junction Capacitance**

