

# GUF10A THRU GUF10Q

**SINTERED GLASS JUNCTION  
FAST SWITCHING PLASTIC RECTIFIER**  
VOLTAGE:50 TO 1200V      CURRENT: 1.0A

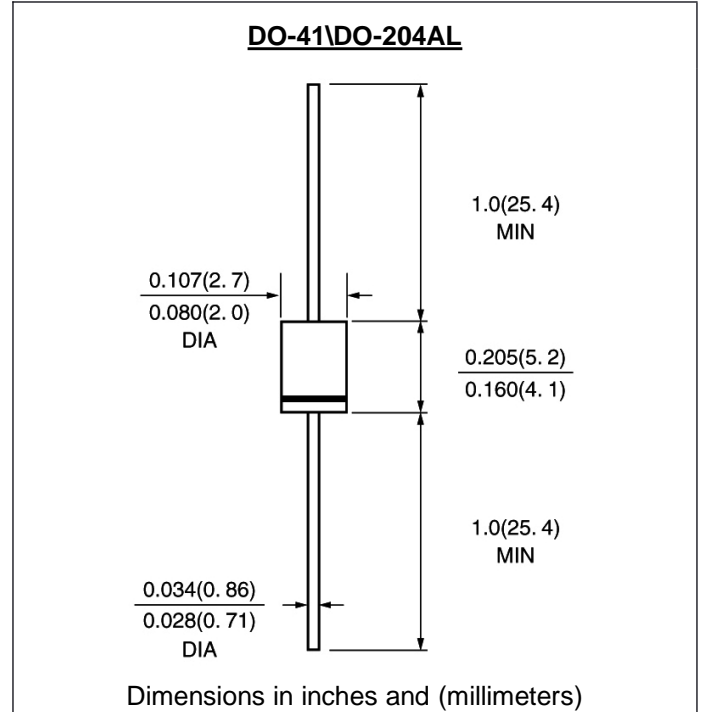


## FEATURE

High temperature metallurgically bonded construction  
Sintered glass cavity free junction  
Capability of meeting environmental standard of MIL-S-19500  
High temperature soldering guaranteed  
350°C /10sec/0.375"lead length at 5 lbs tension  
Operate at Ta =55°C with no thermal run away  
Typical Ir<0.2μA  
Low power loss, high efficient

## MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
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)

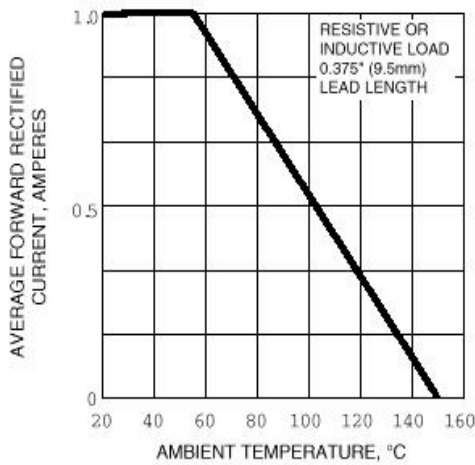
	Symbol	GUF 10A	GUF 10B	GUF 10D	GUF 10F	GUF 10G	GUF 10J	GUF 10K	GUF 10M	GUF 10Q	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	300	400	600	800	1000	1200	V
Maximum RMS Voltage	Vrms	35	70	140	210	280	420	560	700	840	V
Maximum DC blocking Voltage	Vdc	50	100	200	300	400	600	800	1000	1200	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	If(av)	1.0									A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30									A
Maximum Forward Voltage at rated Forward Current and 25°C	Vf	1.1		1.4			1.7			V	
Maximum full load reverse current full cycle average at 55°C Ambient	Ir(av)	50									μA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	50									μA
Maximum Reverse Recovery Time (Note 1)	Trr	50			75			100		nS	
Typical Junction Capacitance (Note 2)	Cj	17			15					pF	
Typical Thermal Resistance (Note 3)	Rth(ja)	50			60					°C/W	
Storage and Operating Temperature Range	Tstg, Tj	-65 to +175									°C

Note:

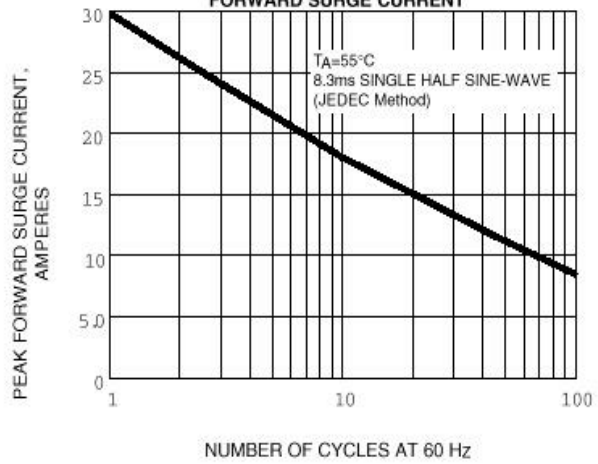
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

# RATINGS AND CHARACTERISTIC CURVES GUF10A THRU GUF10Q

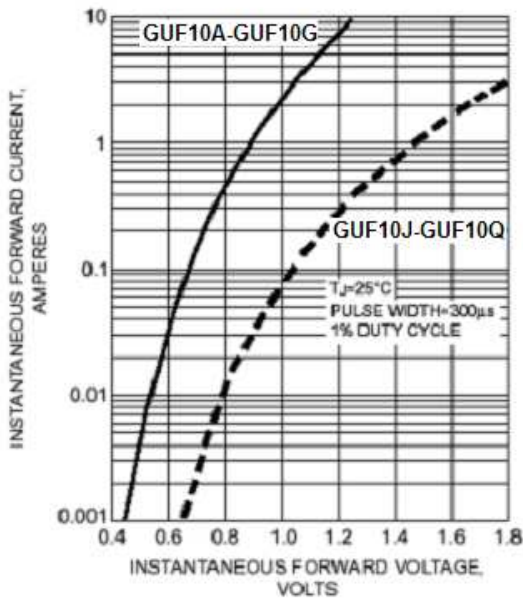
**FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE**



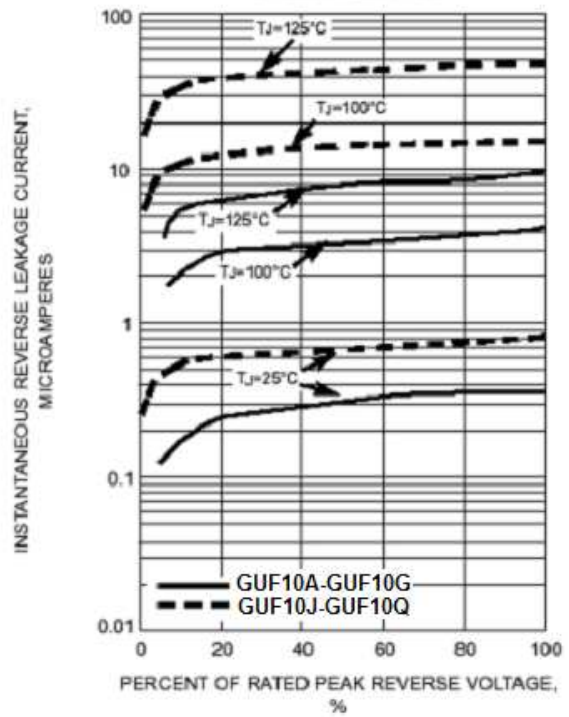
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**

