

**ULTRA FAST
GLASS PASSIVATED RECTIFIERS**

REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 2.0 Amperes

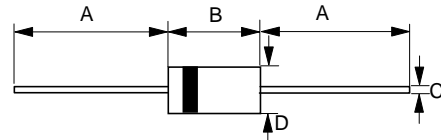
FEATURES

- Glass passivated chip
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Chloroethene and similar solvents
- Plastic material has UL flammability classification 94V-0

MECHANICAL DATA

- Case : JEDEC DO-15 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.015 ounces, 0.4 grams
- Mounting position : Any

DO-15



DO-15		
Dim.	Min.	Max.
A	25.4	-
B	5.80	7.60
C	0.71 \varnothing	0.86 \varnothing
D	2.60 \varnothing	3.60 \varnothing
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	UG2001	UG2002	UG2003	UG2004	UG2005	UG2006	UG2007	UNIT	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current @TA=55°C	I(AV)	2.0							A	
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load(JEDEC Method)	IFSM	60							A	
Maximum forward Voltage at 2.0A DC	VF	1.0		1.3		1.7			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ=25°C @TJ=100°C	IR	5 100							uA	
Maximum Reverse Recovery Time (Note 1)	TRR	50				75				ns
Typical Junction Capacitance (Note 2)	CJ	30				15				pF
Typical Thermal Resistance (Note 3)	RθJA	25							°C/W	
Storage / Operating Temperature Range	TSTG, TJ	-55 to +150							°C	

NOTES : 1. Test condition of TRR:IF=0.5A,IR=1.0A,IRR=0.25A..
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Thermal Resistance Junction to Ambient.

FIG.1 - FORWARD CURRENT DERATING CURVE

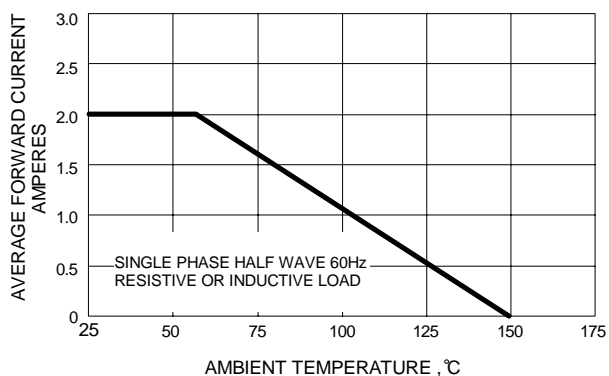


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

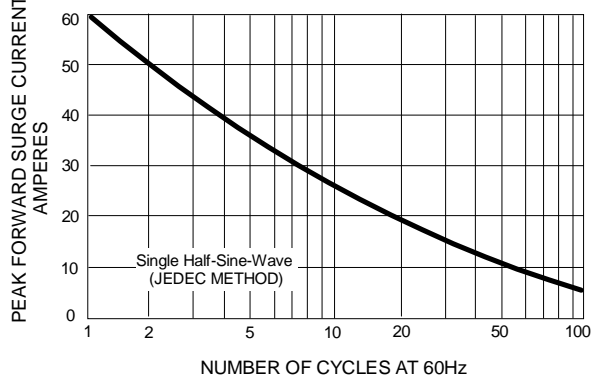


FIG.3 - TYPICAL JUNCTION CAPACITANCE

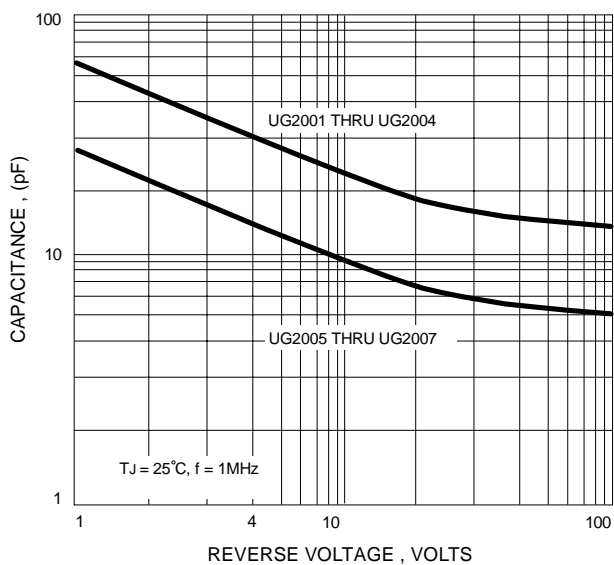


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

