

**GLASS PASSIVATED RECTIFIERS**

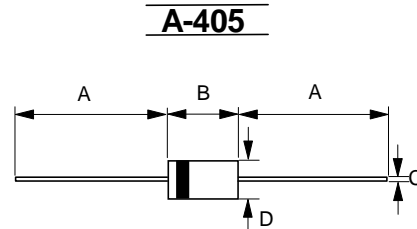
REVERSE VOLTAGE - **50 to 1000** Volts  
FORWARD CURRENT - **1.0** Ampere

**FEATURES**

- Glass passivated chip
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0

**MECHANICAL DATA**

- Case : JEDEC A-405 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.008 ounces, 0.22 grams
- Mounting position : Any



A-405		
Dim.	Min.	Max.
A	25.4	-
B	4.10	5.20
C	0.53 $\varnothing$	0.64 $\varnothing$
D	2.00 $\varnothing$	2.70 $\varnothing$
All Dimensions in millimeter		

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

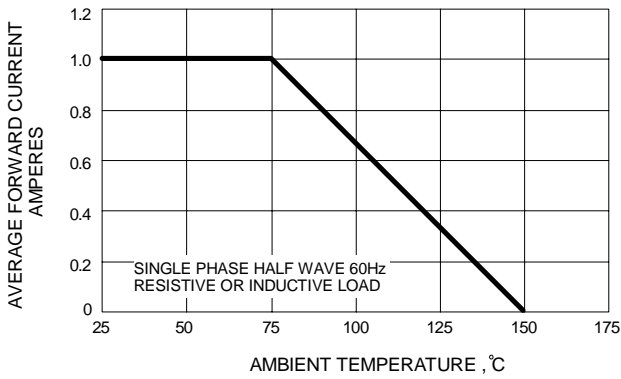
Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	1N4001GL	1N4002GL	1N4003GL	1N4004GL	1N4005GL	1N4006GL	1N4007GL	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>A</sub> =75°C	I(AV)	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	I <sub>FSM</sub>	30							A
Maximum forward Voltage at 1.0A DC	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =125°C	I <sub>R</sub>	5.0 50							uA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	10							pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	45							°C/W
Typical Reverse Recovery Time (Note 3)	T <sub>RR</sub>	2.0							us
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

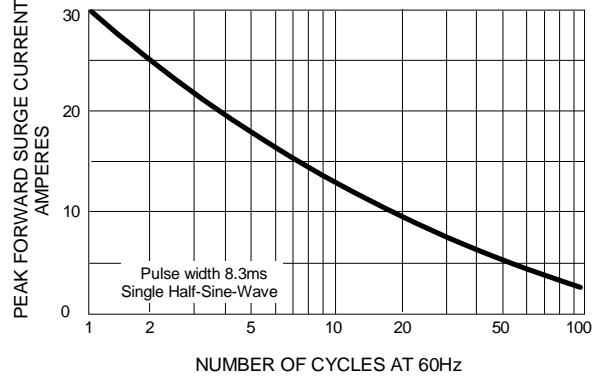
NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2.Thermal Resistance Junction to Ambient.  
3. Reverse Recovery Test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>RR</sub>=0.25A.

REV. 2, 01-Dec-2000, KDDB01

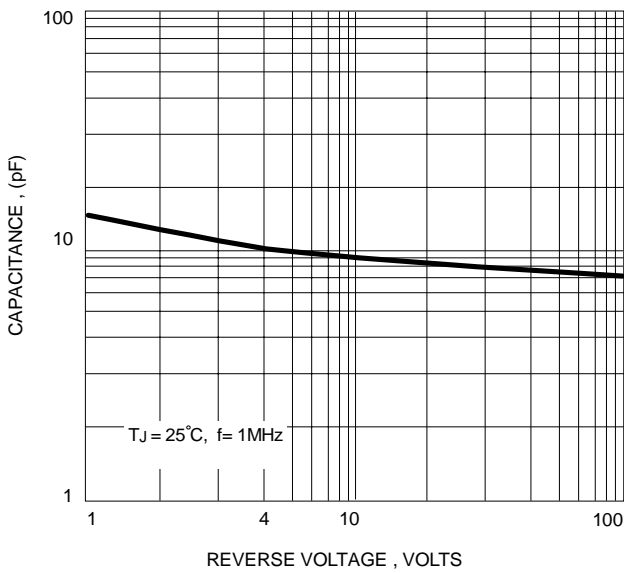
**FIG.1 - FORWARD CURRENT DERATING CURVE**



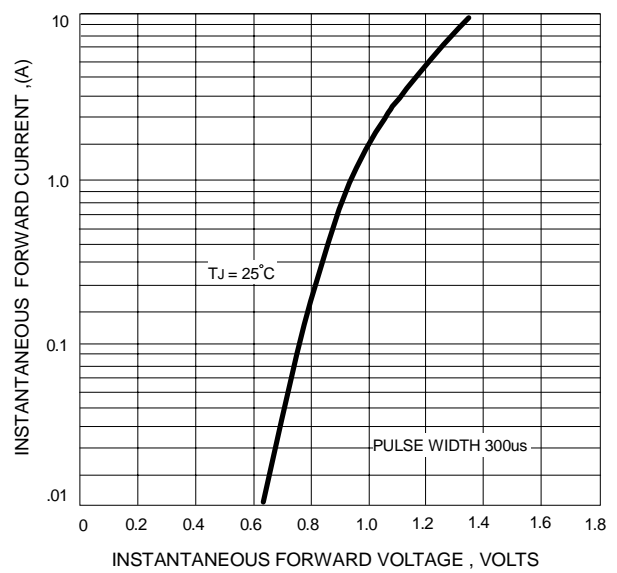
**FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT**



**FIG.3 - TYPICAL JUNCTION CAPACITANCE**



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

