

GLASS PASSIVATED RECTIFIERS

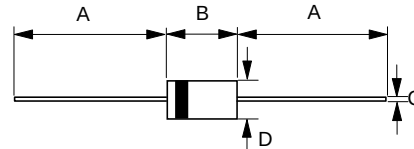
REVERSE VOLTAGE - **50 to 1000** Volts
FORWARD CURRENT - **1.0** Ampere

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


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	1N 4001GL	1N 4002GL	1N 4003GL	1N 4004GL	1N 4005GL	1N 4006GL	1N 4007GL	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A = 75^\circ\text{C}$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	I_{FSM}	30							A
Maximum forward Voltage at 1.0A DC	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_J = 25^\circ\text{C}$ @ $T_J = 125^\circ\text{C}$	I_R	5.0 50							μA
Typical Junction Capacitance (Note 1)	C_J	10							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	45							$^\circ\text{C/W}$
Typical Reverse Recovery Time (Note 3)	T_{RR}	2.0							μs
Operating Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

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: $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{RR} = 0.25\text{A}$.

REV. 2, 01-Dec-2000, KDD01

FIG.1 - FORWARD CURRENT DERATING CURVE

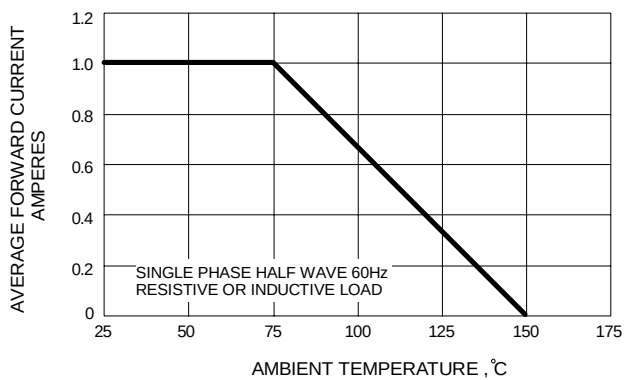


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

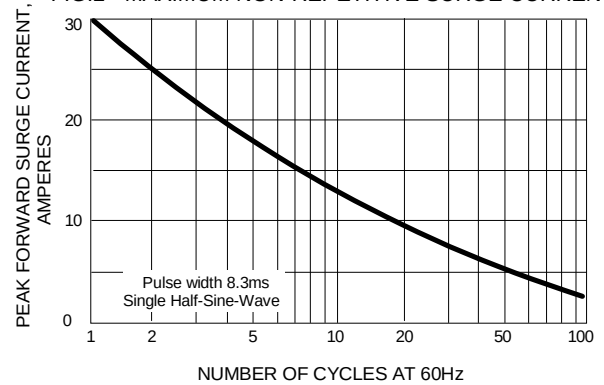


FIG.3 - TYPICAL JUNCTION CAPACITANCE

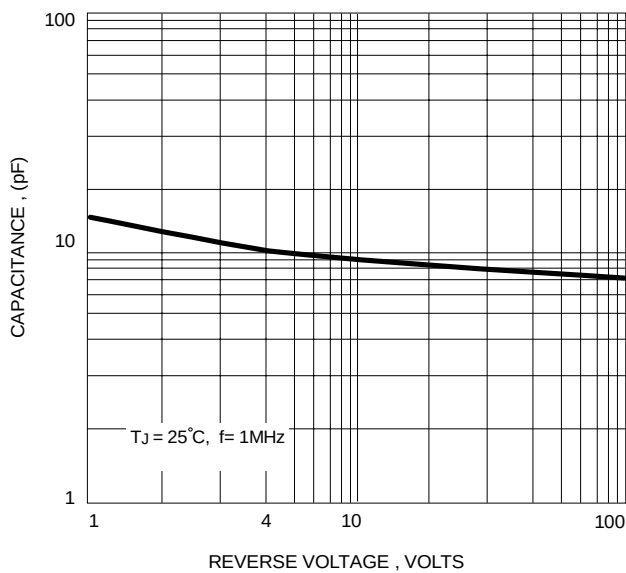


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

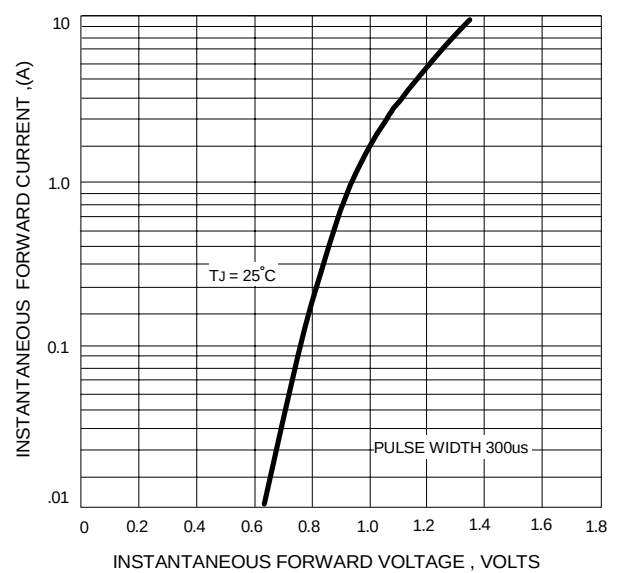


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

