



# GL1A-GL1M

Surface Mount Rectifiers

**REVERSE VOLTAGE: 50 - 1000 V**

**CURRENT: 1.0 A**

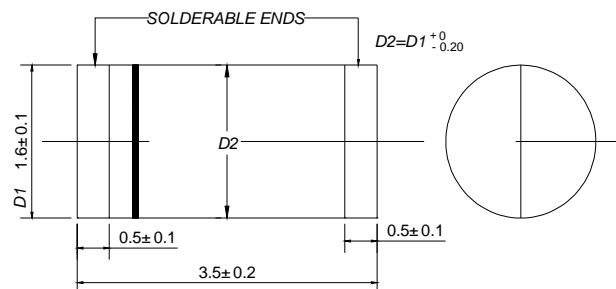
## Features

- ✧ Plastic package has underwriters laboratory flammability classifications
- ✧ For surface mounted applications
- ✧ Low profile package
- ✧ Built-in strain relief, ideal for automated placement
- ✧ Glass passivated chip junction
- ✧ High temperature soldering:
- ✧ 250°C/10 seconds at terminals

## Mechanical Data

- ✧ Case: JEDEC DO-213AA, molded plastic over passivated chip
- ✧ Polarity: Color band denotes cathode end
- ✧ Weight: 0.0014 ounces, 0.036 gram

## DO - 213AA



Dimensions in millimeters

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		GL1A	GL1B	GL1D	GL1G	GL1J	GL1K	GL1M	UNITS
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RWS</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>L</sub> =75 °C	I <sub>F(AV)</sub>	1.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30							A
Maximum instantaneous forward voltage at 1.0 A	V <sub>F</sub>	1.2				1.3			V
Maximum DC reverse current @T <sub>A</sub> =25°C at rated DC blocking voltage @T <sub>A</sub> =125°C	I <sub>R</sub>	5.0 50.0							μA
Typical junction capacitance(NOTE 2)	C <sub>J</sub>	4.0							pF
Typical reverse recovery time(NOTE3)	t <sub>rr</sub>	1.5							μS
Typical thermal resistance (NOTE 4)	R <sub>θJA</sub>	150							°C/W
operating junction temperature range	T <sub>J</sub>	-55-----+150							°C
Storage temperature range	T <sub>STG</sub>	-55-----+150							°C

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0volts

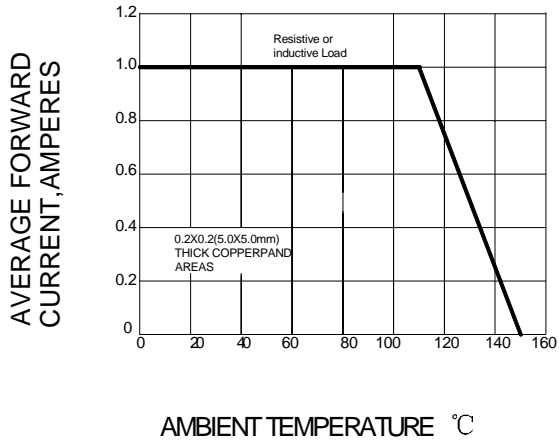
2. Thermal resistance from junction to ambient and junction to lead P.C.B mounted on 0.27"X0.27"(7.0X7.0mm2) copper pad areas

3. Measured with  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $t_{rr} = 0.25\text{A}$ .

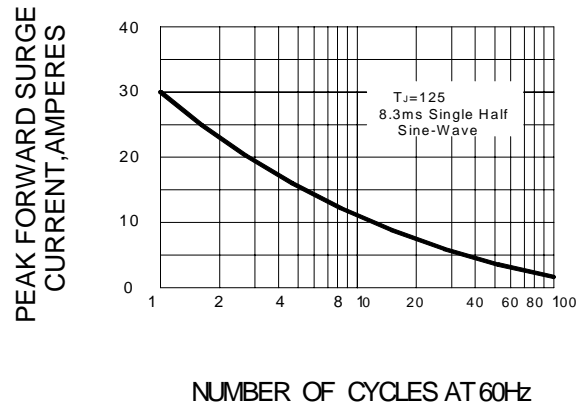
4. Thermal resistance from junction to ambient and junction to lead P.C.B. mounted on 0.27"X0.27"(7.0X7.0mm2) copper pad areas

## Ratings AND Characteristic Curves

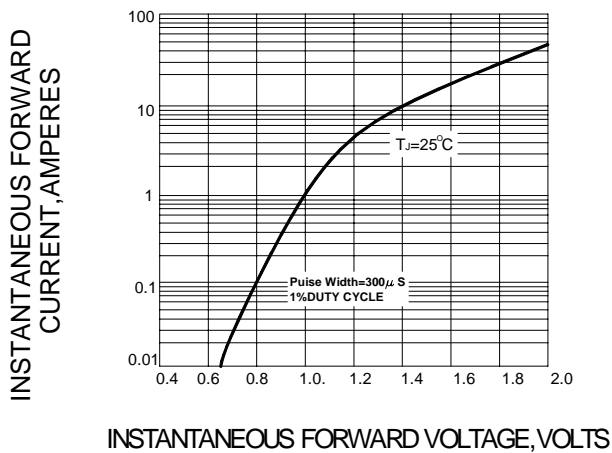
**FIG.1 – FORWARD DERATING CURVE**



**FIG.2 PEAK FORWARD SURGE CURRENT**



**FIG.3 – TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**

