



GL1A-GL1M

Surface Mount Rectifiers

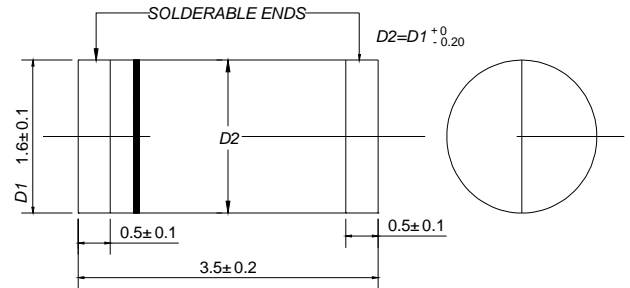
REVERSE VOLTAGE: 50 - 1000 V

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

DO - 213AA



Dimensions in millimeters

Mechanical Data

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

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_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RWS}	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 @ $T_L=75^\circ\text{C}$	$I_{F(AV)}$	1.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Maximum instantaneous forward voltage at 1.0 A	V_F	1.2				1.3			V
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	I_R	5.0 50.0							μA
Typical junction capacitance (NOTE 2)	C_J	4.0							pF
Typical reverse recovery time (NOTE 3)	t_{rr}	1.5							μS
Typical thermal resistance (NOTE 4)	$R_{\theta JA}$	150							$^\circ\text{C/W}$
operating junction temperature range	T_J	-55-----+150							$^\circ\text{C}$
Storage temperature range	T_{STG}	-55-----+150							$^\circ\text{C}$

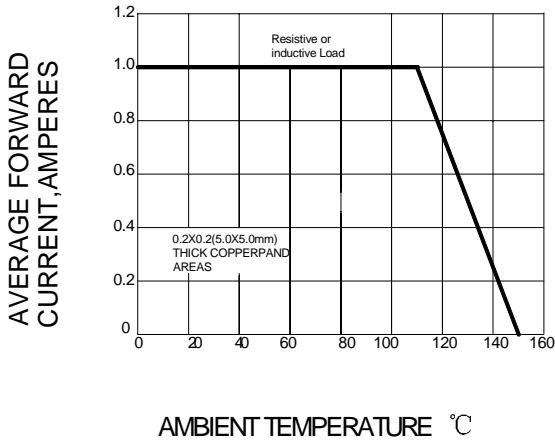
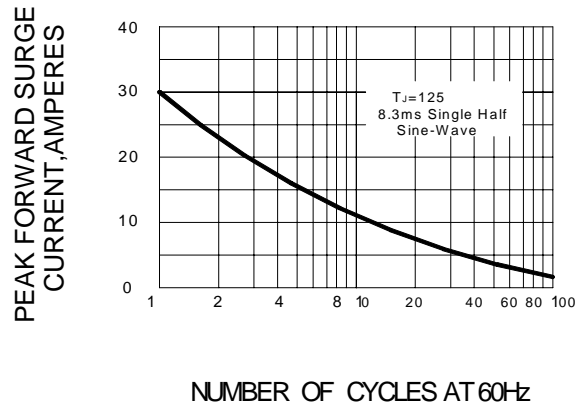
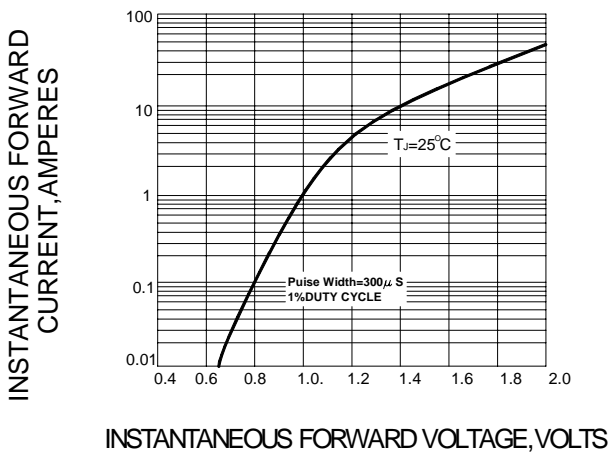
NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0volts

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 $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$.

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
