GL1A-GL1J

SURFACE MOUNT RECTIFIER

VOLTAGE RANGE: 50 --- 600 V
CURRENT: 1.0 A

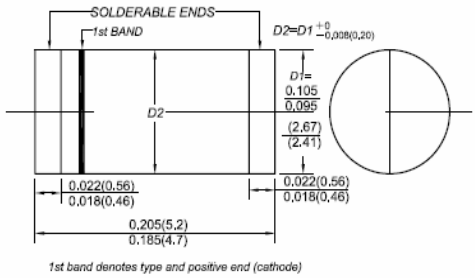
FEATURES

- ◇ Plastic package has underwriters laboratories flammability classification 94V-0
- ◇ Glass passivated chip junction
- ◇ For surface mount applications
- ◇ High temperature metallurgically bonded construction
- ◇ Cavity-free glass passivated junction
- ◇ High temperature soldering guaranteed:450 ℃/5 seconds at terminals.Complete device sub-mersible temperature of 265 ℃ for 10 seconds in solder bath

MECHANICAL DATA

- ◇ Case: JEDEC DO-213AB,molded plastic
- ◇ Terminals: Axial lead ,solderable per MIL- STD-750,Method 2026
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.0046 ounces, 0.116 grams
- ◇ Mounting position: Any

DO - 213AB



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		GL 1A	GL 1B	GL 1D	GL 1F	GL 1G	GL 1H	GL 1J	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	300	400	500	600	V
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	350	420	V
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	500	600	V
Maximum average forward rectified current T_T=75℃	$I_{(AV)}$	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 @1.0A	V_F	1.25			1.35		1.70		V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=125℃	I_R	5.0 50							μA
Maximum reverse recovery time (Note 1)	t_{rr}	50							ns
Typical junction capacitance (Note 2)	C_j	15							pF
Typical thermal resistance (Note 3)	$R_{\theta JA}$	150							K/W
Operating junction temperature range	T_j	- 55 ---- +175							℃
Storage temperature range	T_{STG}	- 55 ---- +175							℃

NOTE: 1. Measured with I_F=0.5A,I_R=1.0A,I_{rr}=0.25A
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Thermal resistance from junction to ambient, 0.24×0.24"(6.0×6.0mm) copper pads to each terminal.

FIG.1 -- FORWARD CURRENT DERATING CURVE

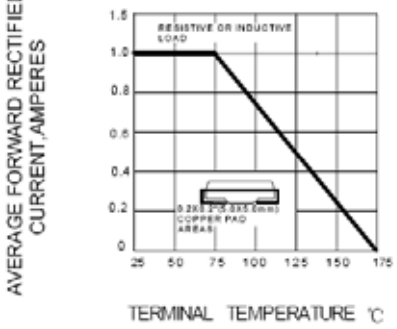


FIG.2 -- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

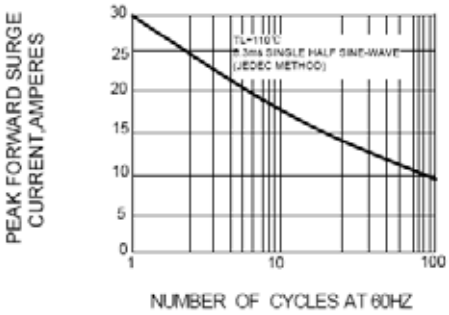


FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

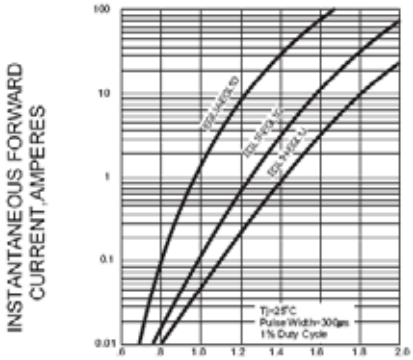


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

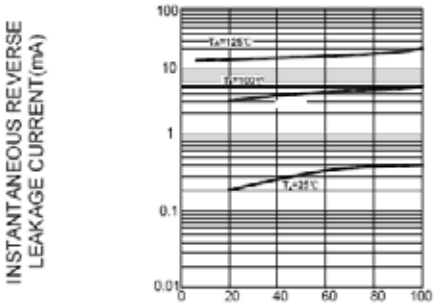


FIG.5 -- TYPICAL JUNCTION CAPACITANCE

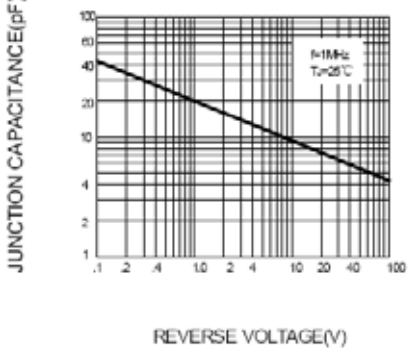


FIG.6 – TYPICAL TRANSIENT THERMAL IMPEDANCE