GL41A THRU GL41M

SINTERED GLASS JUNCTION SURFACE MOUNTED RECTIFIER

VOLTAGE: 50 TO 1000V **CURRENT: 1.0A**

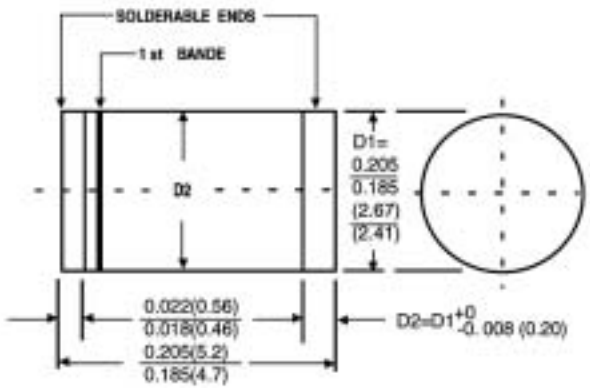
FEATURE

High temperature metallurgi cally bonded construction
Sintered glass cavity-free junction
Case over-molded with UL-94 class V-0 flame Retardant epoxy
Capability of meeting environmental standard of MIL-S-19500
High temperature soldering guaranteed 450ºC/5sec/at terminal
Operate at Ta =55ºC with no thermal run away
Typical Ir<0.1μA

MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Polarity: Two bands indicates cathode (1st band denotes device type and 2nd band denotes voltage type)
Mounting position: any

MELF



1st band denotes type and polarity
2cnd band denotes voltage type

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25ºC, unless otherwise stated, for capacitive load, derate current by 20%)

	SYMBOL	GL 41A	GL 41B	GL 41D	GL 41G	GL 41J	GL 41K	GL 41M	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =75ºC	If(av)	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30.0							A
Maximum Instantaneous Forward Voltage at 1.0A	Vf	1.1					1.2		V
Maximum full load reverse current full cycle average at Ta =75ºC	Ir(av)	30.0							μA
Maximum DC Reverse Current Ta =25ºC at rated DC blocking voltage Ta =125ºC	Ir	5.0 50.0							μA μA
Typical Junction Capacitance (Note 1)	Cj	8.0							pF
Typical Thermal Resistance (Note 2)	R(ja)	75.0							ºC /W
Storage and Operating Junction Temperature	Tst, Tj	-65 to +175							ºC
Polarity Color Band (2nd Band)		Gray	Red	Orange	Yellow	Green	Blue	Violet	

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient 6.0mm^2 copper pad to each terminal

RATINGS AND CHARACTERISTIC CURVES GL41A THRU GL41M

FIG. 1 - FORWARD CURRENT DERATING CURVE

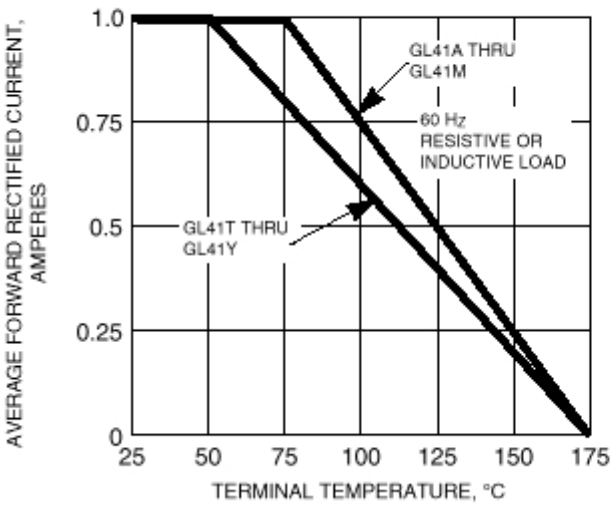


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

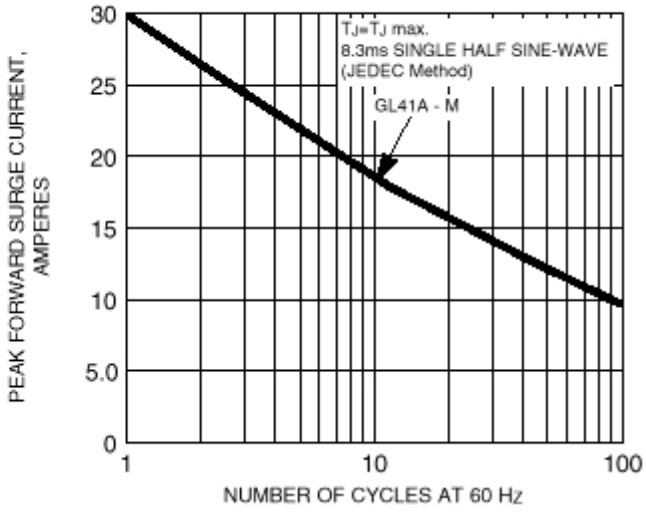


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

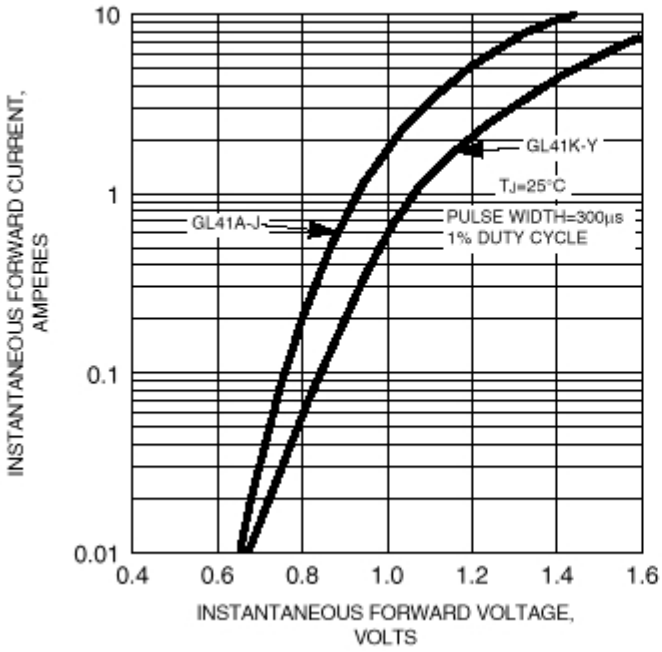


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

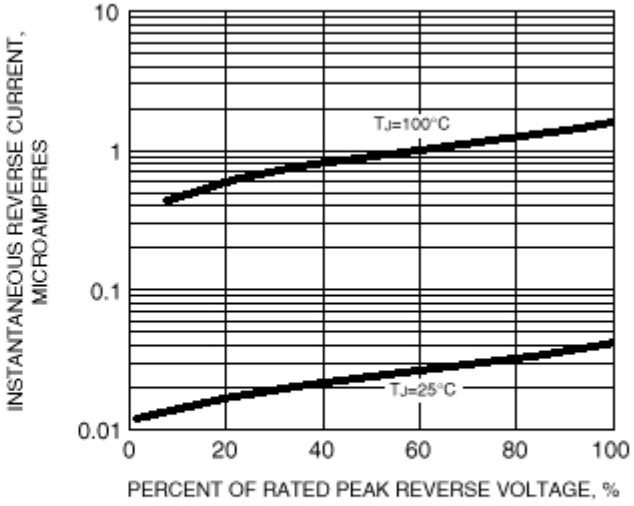
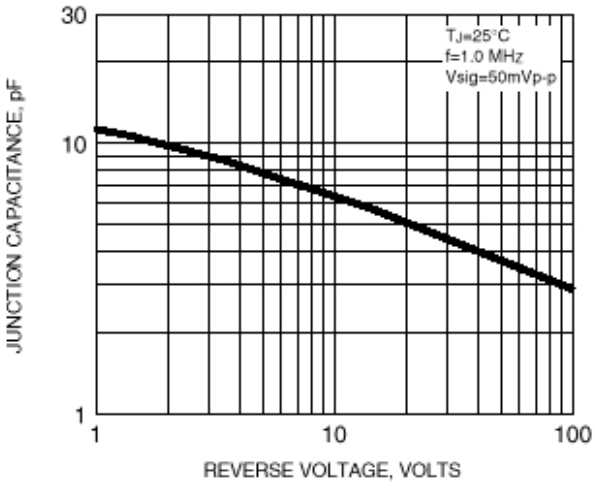


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



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[1] Rev.A4, 1-Jul-03