

# GL41Y

## GLASS PASSIVATED JUNCTION SILICON RECTIFIER

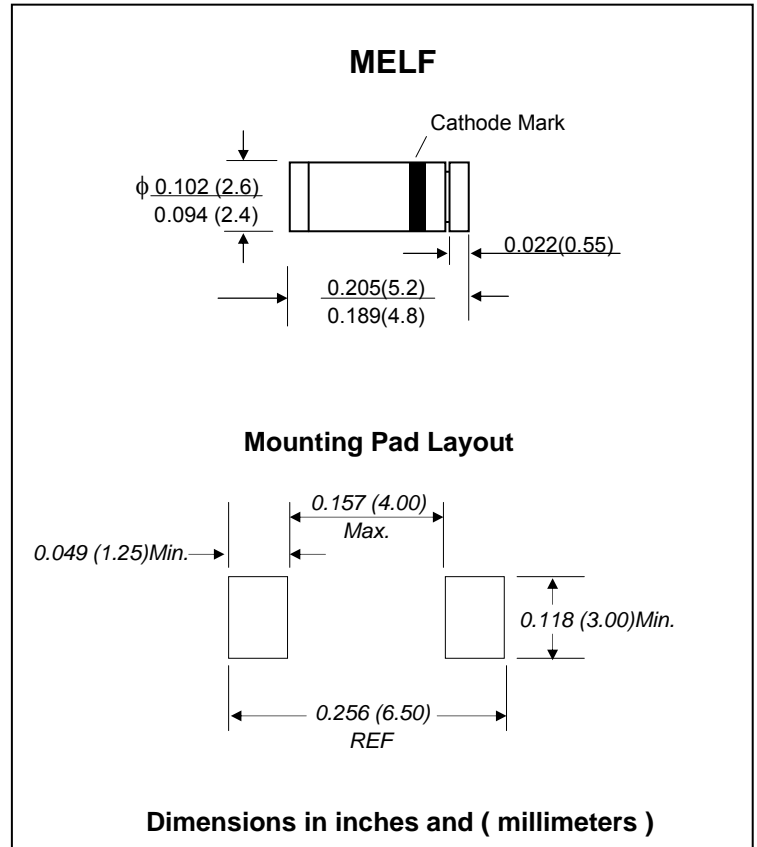
**PRV : 1600 Volts**  
**Io : 1.0 Ampere**

### FEATURES :

- \* Glass passivated junction chip
- \* High current capability
- \* High reliability
- \* Low reverse current
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

- \* Case : MELF Glass Case
- \* Weight : 0.25 g (approximately)



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

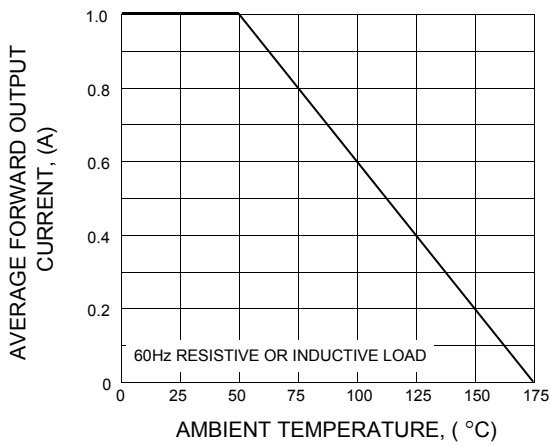
Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	1600	V
Maximum RMS Voltage	$V_{RMS}$	1120	V
Maximum DC Blocking Voltage	$V_{DC}$	1600	V
Maximum Average Forward Current	$I_{F(AV)}$	1.0	A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$	30	A
Maximum Forward Voltage at $I_F = 1.0$ Amp.	$V_F$	1.2	V
Maximum DC Reverse Current $T_a = 25$ °C	$I_R$	10	$\mu A$
at rated DC Blocking Voltage $T_a = 125$ °C	$I_{R(H)}$	50	$\mu A$
Maximum Junction Capacitance (Note1)	$C_J$	8.0	pF
Maximum Thermal Resistance (Note2)	$R_{\theta JA}$	75	°C/W
Junction Temperature Range	$T_J$	- 65 to + 175	°C
Storage Temperature Range	$T_{STG}$	- 65 to + 175	°C

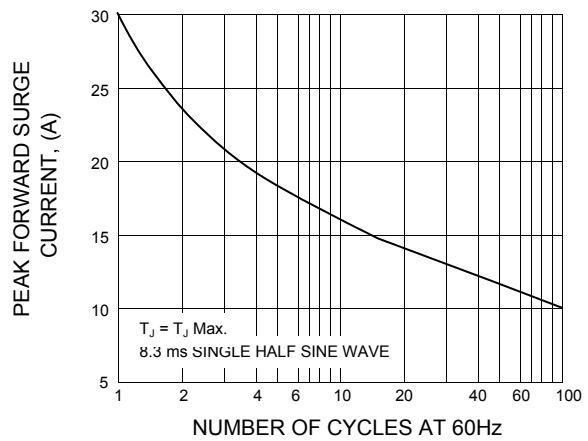
**Notes :** (1) Measured at 1.0 MHz and applied reverse voltage of 4.0VDC  
 (2) Thermal resistance from Junction to Ambient at 0.24 × 0.24" (6.0 × 6.0 mm) copper pads to each terminal.

## RATING AND CHARACTERISTIC CURVES ( GL41Y )

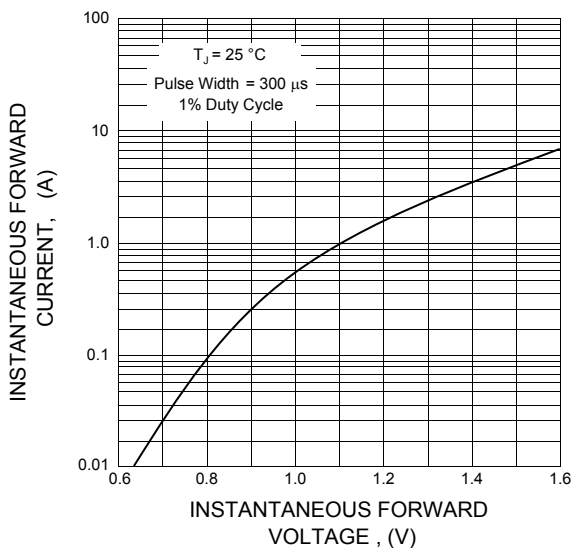
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

