

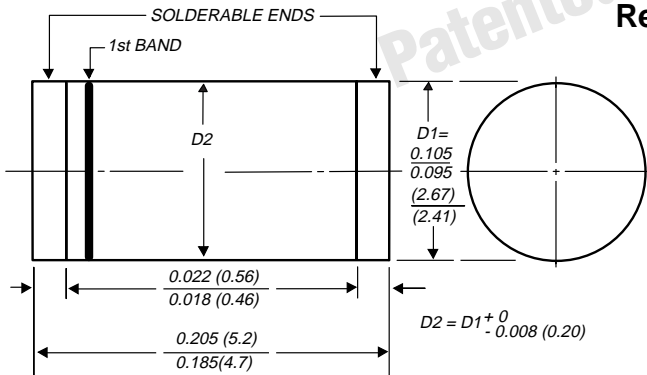
BYM10-50 thru BYM10-1000

GL41A thru GL41Y

Surface Mount Glass Passivated Junction Rectifier



DO-213AB



1st band denotes type and positive end (cathode)

Dimensions in inches and (millimeters)

*Glass-plastic encapsulation is covered by

Patent No. 3,996,602 and brazed-lead assembly to Patent No. 3,930,306



Reverse Voltage 50 to 1000V Forward Current 1.0A

Features

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Capable of meeting environmental standards of MIL-S-19500
- For surface mount applications
- High temperature metallurgically bonded construction
- Cavity-free glass passivated junction
- High temperature soldering guaranteed: 450°C/5 seconds at terminals. Complete device submersible temperature of 265°C for 10 seconds in solder bath

Mechanical Data

Case: JEDEC DO-213AB, molded plastic over glass body

Terminals: Plated terminals, solderable per MIL-STD-750, Method 2026

Polarity: Two bands indicate cathode end – 1st band denotes device type and 2nd band denotes repetitive peak reverse voltage rating

Mounting Position: Any **Weight:** 0.0046oz, 0.116g

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

	Symbol	BYM10				BYM10					Unit
		-50	-100	-200	-400	-600	-800	-1000			
		GL41A	GL41B	GL41D	GL41G	GL41J	GL41K	GL41M	GL41T	GL41Y	
Standard recovery device: 1st band is white		Gray	Red	Orange	Yellow	Green	Blue	Violet	White	Brown	
Polarity color bands (2nd Band)											
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	1300	1600	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	910	1120	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	1300	1600	V
Maximum average forward rectified current (See Fig. 1)	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 full load reverse current full cycle average at T _A = 75°C	I _{R(AV)}	30									μA
Typical thermal resistance (Note 1)	R _{θJA}	75									°C/W
(Note 2)	R _{θJT}	30									
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +175									°C

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

	Symbol	BYM10				BYM10					Unit
		-50	-100	-200	-400	-600	-800	-1000			
		GL41A	GL41B	GL41D	GL41G	GL41J	GL41K	GL41M	GL41T	GL41Y	
Standard recovery device: 1st band is white											
Maximum instantaneous forward voltage at 1.0A	V _F	1.1					1.2				V
Maximum DC reverse current at rated DC blocking voltage	I _R	10 50									μA
Typical junction capacitance at 4.0V, 1MHz	C _J	8.0									pF

Notes: (1) Thermal resistance from junction to ambient, 0.24 x 0.24" (6.0 x 6.0mm) copper pads to each terminal

(2) Thermal resistance from junction to terminal, 0.24 x 0.24" (6.0 x 6.0mm) copper pads to each terminal

Ratings and Characteristic Curves (T_A = 25°C unless otherwise noted)

FIG. 1 - FORWARD CURRENT DERATING CURVE

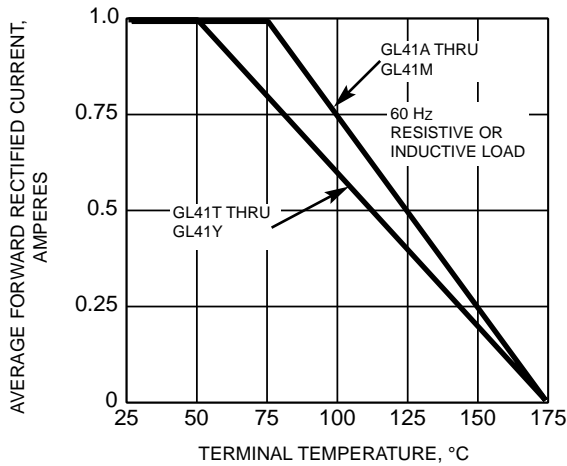


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

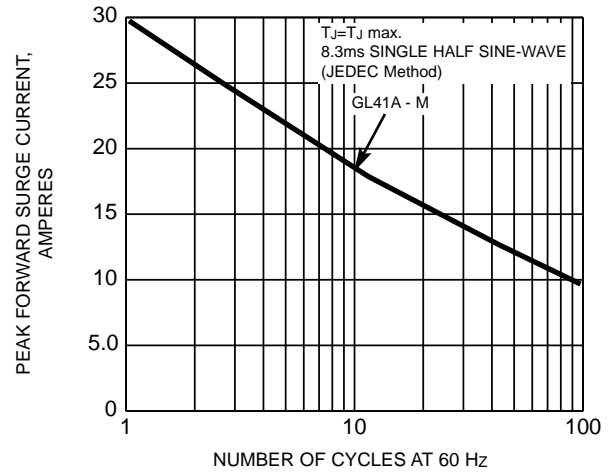


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

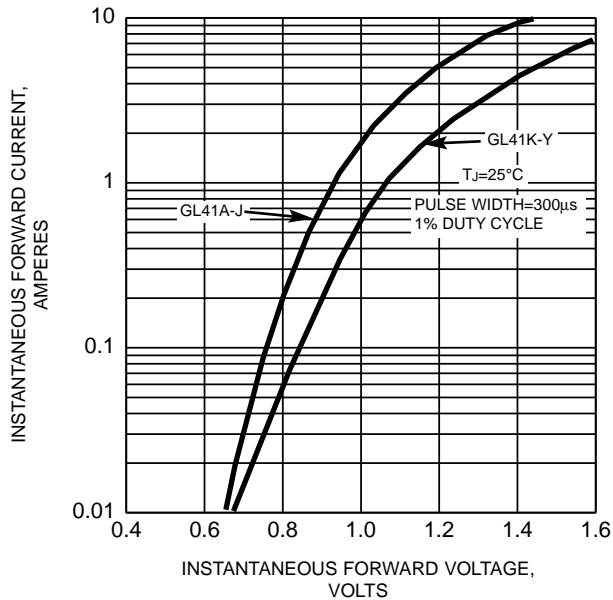


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

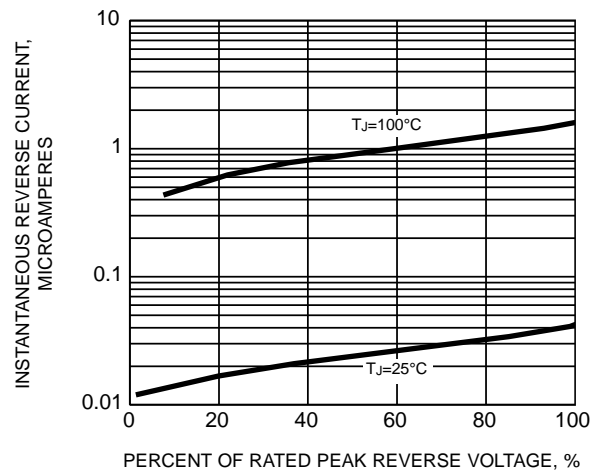


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

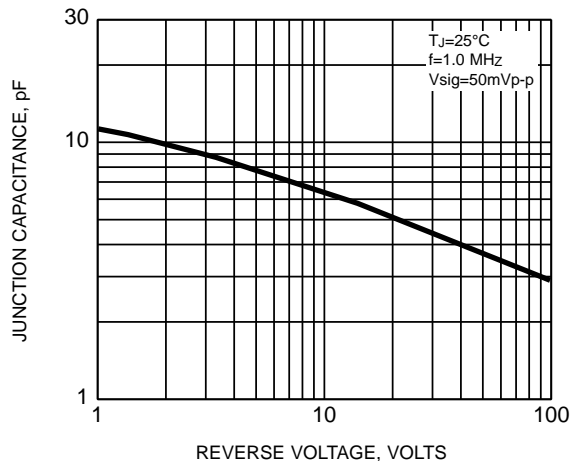


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

