



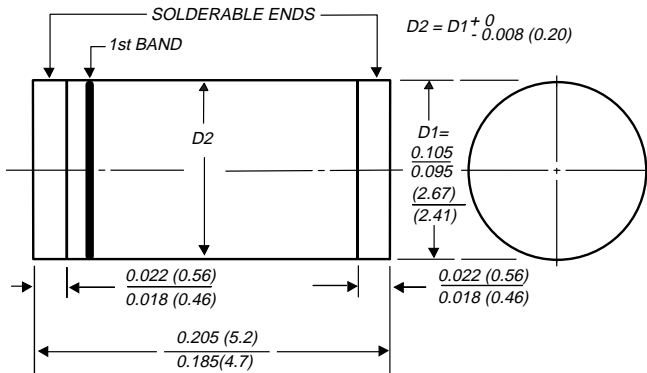
Surface Mount Glass Passivated Junction Rectifiers

Rev. Voltage 50 to 1000V
Forward Current 1.0A



Patented*

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

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: 0.0046 oz., 0.116 g

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												
Polarity color bands (2nd Band)		Gray	Red	Orange	Yellow	Green	Blue	Violet	White	Brown		
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 $T_A = 75^\circ\text{C}$	$I_{R(AV)}$	30										μA
Typical thermal resistance (Note 1)	$R_{\theta JA}$	75										$^\circ\text{C/W}$
(Note 2)	$R_{\theta JT}$	30										
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175										$^\circ\text{C}$

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

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	$T_A = 25^\circ\text{C}$		10		μA
		$T_A = 125^\circ\text{C}$		50		
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

BYM10-50 thru BYM10-1000, GL41A thru GL41Y



Vishay Semiconductors
formerly General Semiconductor

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig 1 – Forward Current Derating Curve

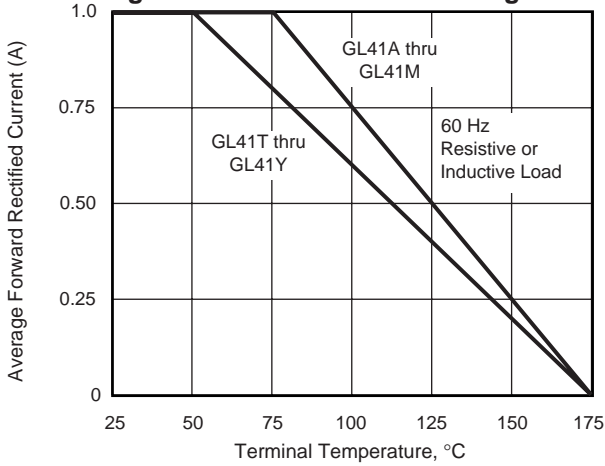


Fig 2 – Maximum Non-repetitive Peak Forward Surge Current

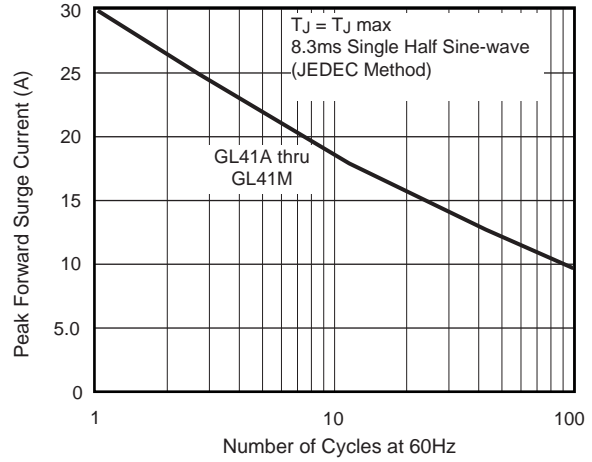


Fig 3 – Typical Instantaneous Forward Characteristics

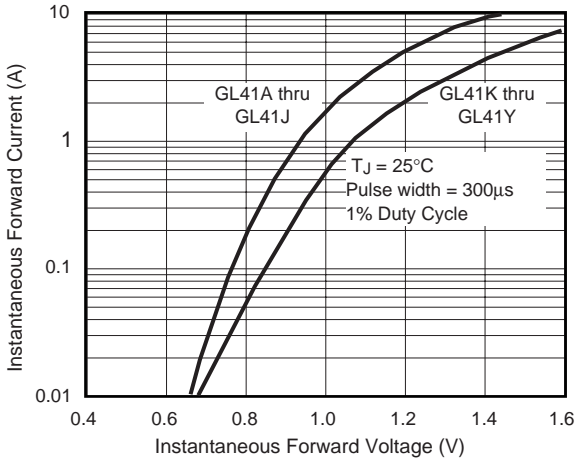


Fig 4 – Maximum Non-repetitive Peak Forward Surge Current

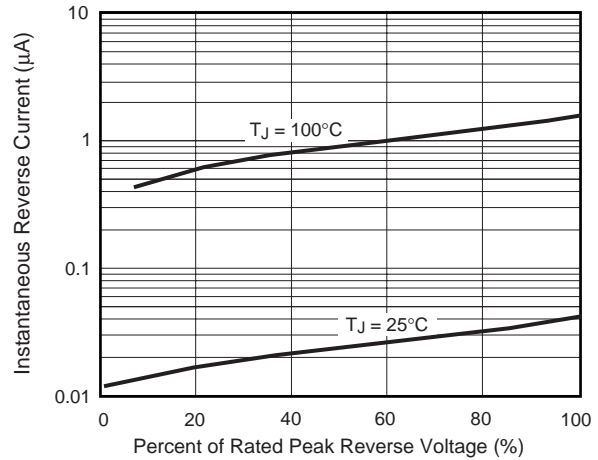


Fig 5 – Typical Junction Capacitance

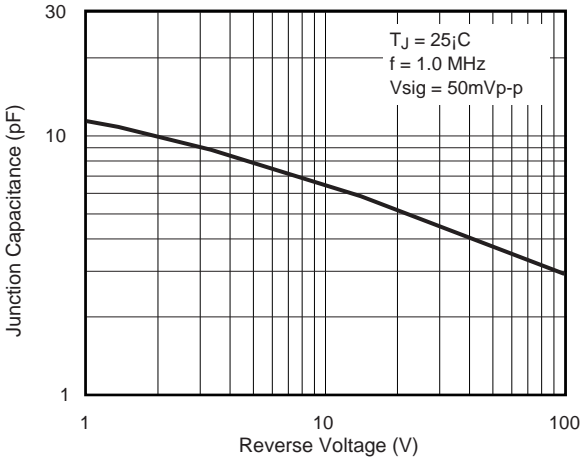
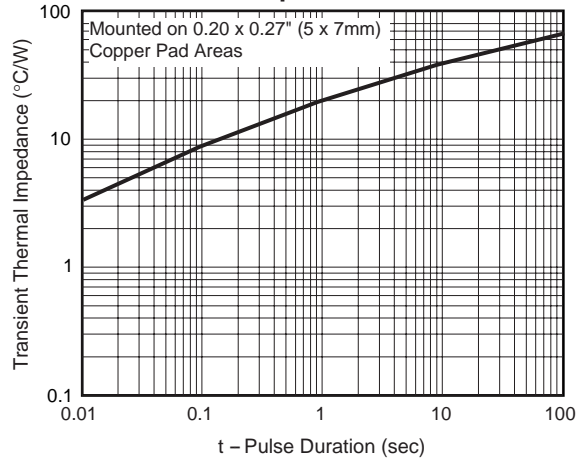


Fig 6 – Typical Transient Thermal Impedance



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