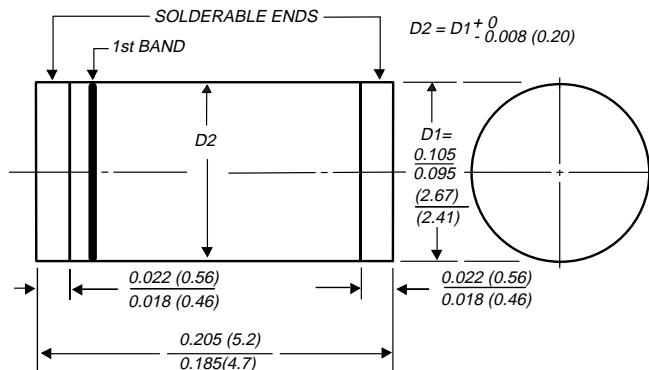


Surface Mount Glass Passivated
Junction RectifiersRev. Voltage 50 to 1000V
Forward Current 1.0A

SUPERRECTIFIER®

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 sub-mersible 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		
Standard recovery device: 1st band is white		GL41A	GL41B	GL41D	GL41G	GL41J	GL41K	GL41M	GL41T	GL41Y
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
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	910	1120
Maximum DC blocking voltage	V _D	50	100	200	400	600	800	1000	1300	1600
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) (Note 2)	R _{θJA} R _{θJT}	75 30								°C/W
Operating junction and storage temperature range	T _{J,TSTG}	-65 to +175								°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 TA = 25°C at rated DC blocking voltage TA = 125°C	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

Vishay Semiconductors
formerly General Semiconductor

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

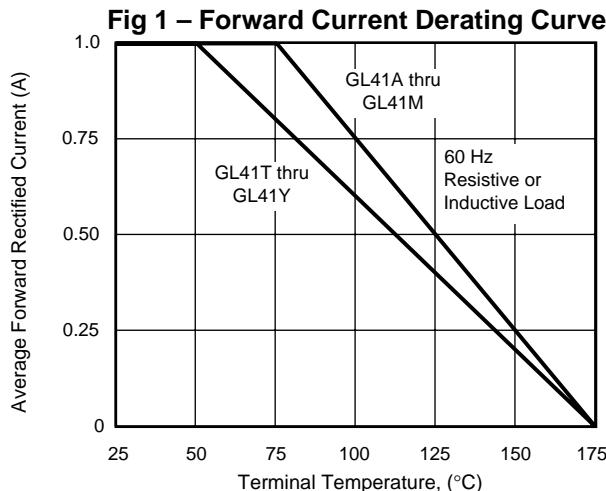


Fig 2 – Maximum Non-repetitive Peak Forward Surge Current

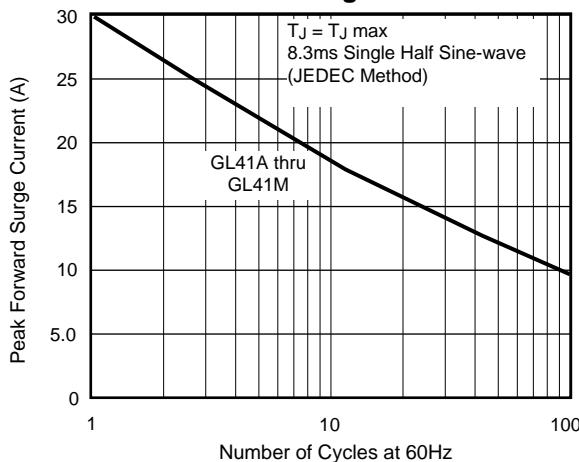


Fig 3 – Typical Instantaneous Forward Characteristics

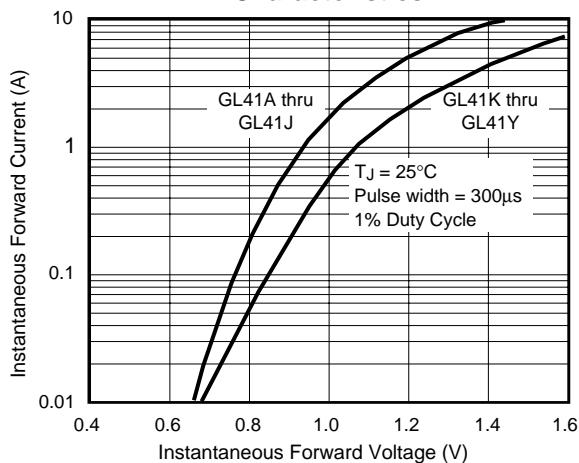


Fig 4 – Maximum Non-repetitive Peak Forward Surge Current

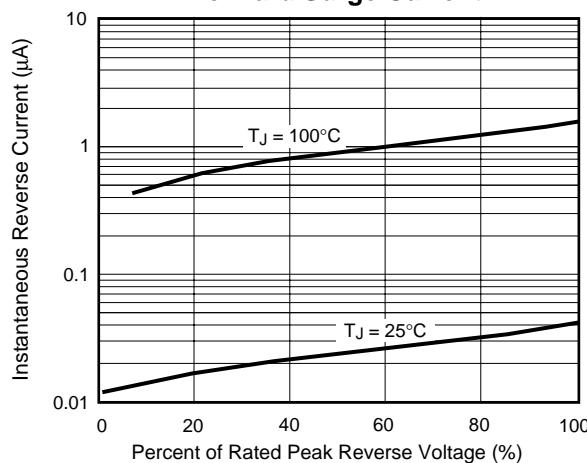


Fig 5 – Typical Junction Capacitance

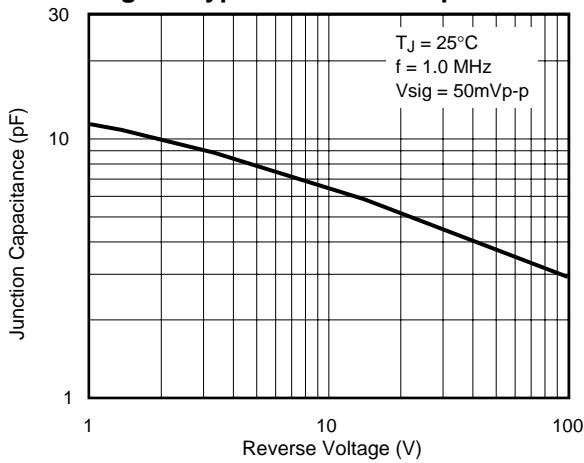


Fig. 6 – Typical Transient Thermal Impedance

