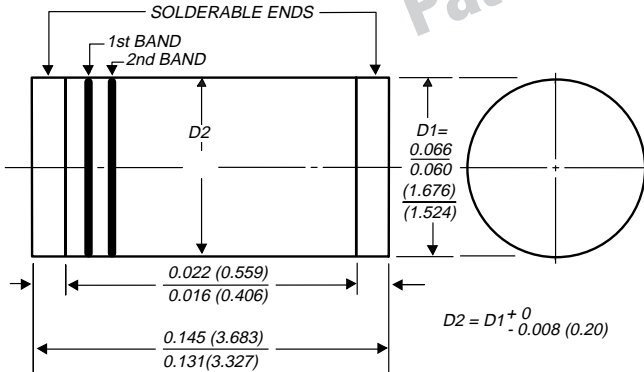




Surface Mount Glass Passivated Junction Rectifiers

Reverse Voltage 50 to 600V
Forward Current 0.5A

DO-213AA



Patented*



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

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 Laboratory Flammability Classification 94V-0
- For surface mount applications
- High temperature metallurgically bonded construction
- Cavity-free glass passivated junction
- Capable of meeting environmental standards of MIL-S-19500
- Fast switching for high efficiency
- High temperature soldering guaranteed: 450°C/5 seconds at terminals. Complete device submersible temperature of 260°C for 10 seconds in solder bath

Mechanical Data

Case: JEDEC DO-213AA, 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: 0.0014 oz., 0.036 g

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Standard recovery device: first band is white	Symbol	GL34A	GL34B	GL34D	GL34G	GL34J	Unit	
Polarity color bands (2nd Band)		Gray	Red	Orange	Yellow	Green		
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	V	
Maximum RMS voltage	VRMS	35	70	140	280	420	V	
Maximum DC blocking voltage	VDC	50	100	200	400	600	V	
Maximum average forward rectified current at T _T = 75°C	I _{F(AV)}	0.5						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	10						A
Max. full load reverse current, full cycle average T _A = 55°C	I _{R(AV)}	30						μA
Maximum thermal resistance (Note 1)	R _{θJA}	150						°C/W
(Note 2)	R _{θJT}	70						
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.

Maximum instantaneous forward voltage at 0.5A	V _F	1.2		1.3	V
Maximum DC reverse current T _A = 25°C at rated DC blocking voltage T _A = 125°C	I _R	5.0		50	μA
Typical reverse recovery time at I _F = 0.5A, I _R = 1.0A, I _{rr} = 0.25A	t _{rr}	1.5			μs
Typical junction capacitance at 4.0V, 1MHz	C _J	4.0			pF

Notes:
 (1) Thermal resistance from junction to ambient, 0.2 x 0.2" (5.0 x 5.0mm) copper pads to each terminal
 (2) Thermal resistance from junction to terminal, 0.2 x 0.2" (5.0 x 5.0mm) copper pads to each terminal

GL34A thru GL34J

Vishay Semiconductors
formerly General Semiconductor



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

Fig. 1 – Forward Current Derating Curve

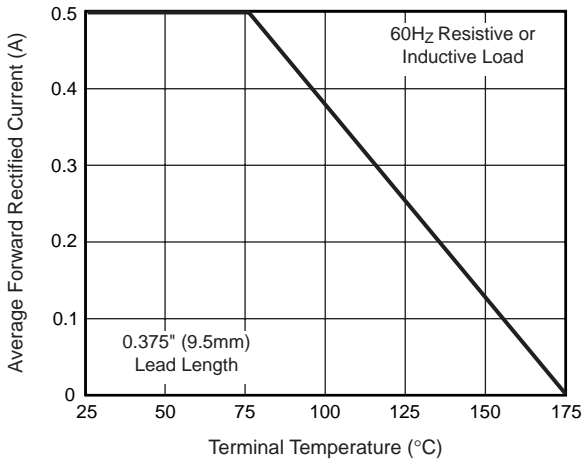


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

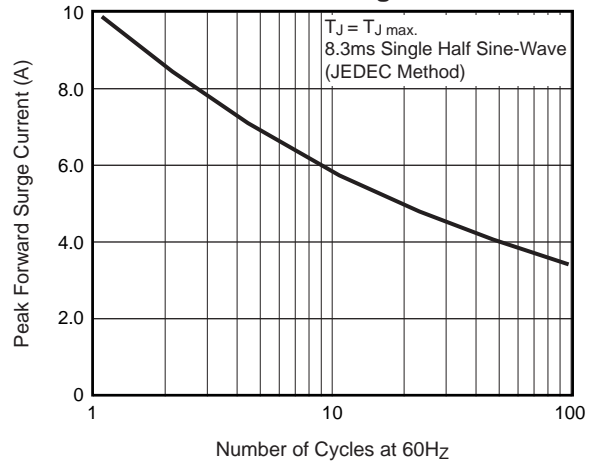


Fig. 3 – Typical Instantaneous Forward Characteristics

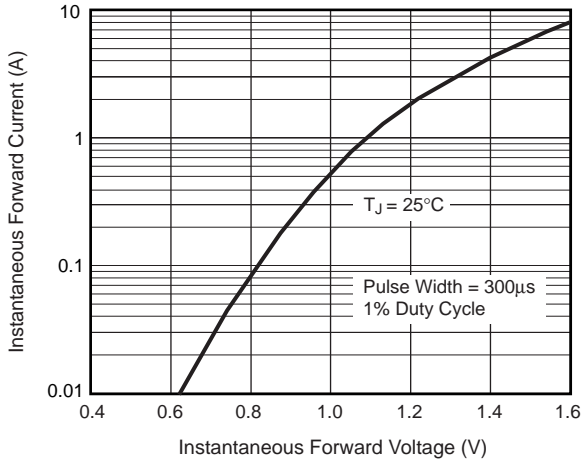


Fig. 4 – Typical Reverse Characteristics

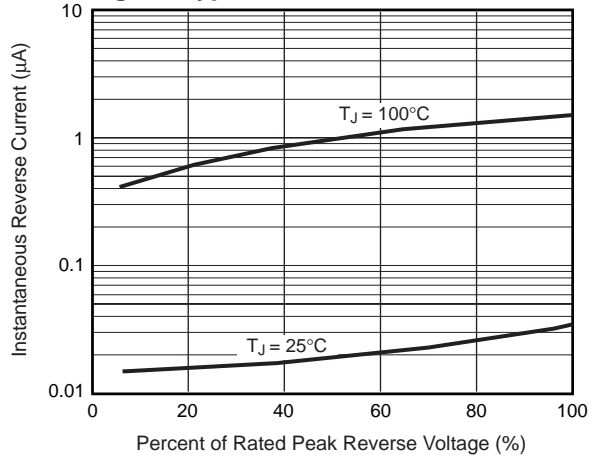


Fig. 5 – Typical Junction Capacitance

