

GL34A THRU GL34J

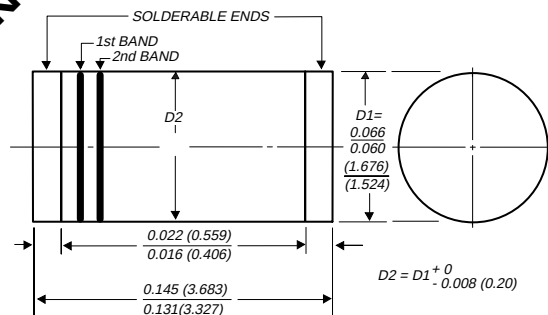
SURFACE MOUNT GLASS PASSIVATED FAST SWITCHING JUNCTION RECTIFIER

Reverse Voltage - 50 to 600 Volts

Forward Current - 0.5 Ampere

PATENTED*

DO-213AA



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

Dimensions in inches and (millimeters)

* Glass-plastic encapsulation technique is covered by

Patent No. 3,996,602 and brazed-end cap assembly by Patent No. 3,930,306

SUPERRECTIFIER®

FEATURES

- ♦ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ♦ For surface mount applications
- ♦ High temperature metallurgically bonded construction
- ♦ Glass passivated cavity-free 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 ounce, 0.036 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Standard recovery device: first band is white	SYMBOLS	GL34A	GL34B	GL34D	GL34G	GL34J	
Polarity color bands (2nd Band)		Gray	Red	Orange	Yellow	Green	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	Volts
Maximum average forward rectified current at $T_J=75^\circ\text{C}$	$I_{(AV)}$	0.5					Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	10.0					Amps
Maximum instantaneous forward voltage at 0.5A	V_F	1.2					Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	I_R	5.0 50.0					μA
Maximum full load reverse current, full cycle average at $T_A=55^\circ\text{C}$	$I_{R(AV)}$	30.0					μA
Typical reverse recovery time (NOTE 1)	t_{rr}	1.5					μs
Typical junction capacitance (NOTE 2)	C_J	4.0					pF
Maximum thermal resistance (NOTE 3) (NOTE 4)	$R_{\theta JA}$ $R_{\theta JT}$	150.0 70.0					$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175					$^\circ\text{C}$

NOTES:

(1) Reverse recovery test conditions $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(3) Thermal resistance from junction to ambient, 0.2 x 0.2" (5.0 x 5.0mm) copper pads to each terminal

(4) Thermal resistance from junction to terminal, 0.2 x 0.2" (5.0 x 5.0mm) copper pads to each terminal

RATINGS AND CHARACTERISTIC CURVES GL34A THRU GL34J

