

BYM05-50 THRU BYM05-600 GL34A THRU GL34J

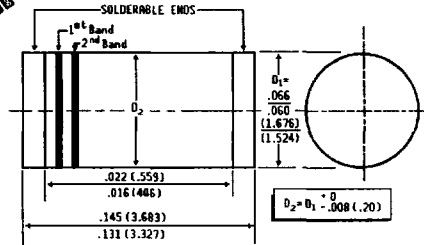
SURFACE MOUNT GLASS PASSIVATED JUNCTION RECTIFIER

Voltage - 50 to 600 Volts Current - 0.5 Amperes

FEATURES

PATENTED*

DO-213AA



Dimensions in inches and (millimeters)

* Glass-plastic encapsulation technique is covered by Patent No. 3,996,602 of 1976; brazed-lead assembly to Patent No. 3,930,306 of 1976

SUPERRECTIFIER®

- ◆ For surface mounted applications
- ◆ High temperature metallurgically bonded
- ◆ Glass passivated junction
- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Capable of meeting environmental standards of MIL-S-19500
- ◆ 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: Molded plastic over glass

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

Polarity: Two bands indicate cathode

1st band denotes device type 2nd band denotes voltage type

Mounting Position: Any **Handling Precautions:** None

Weight: 0.036 gram, 0.0014 ounce

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

SYMBOLS	BYM05					UNITS	
	-50	-100	-200	-400	-600		
Standard recovery time device: 1 st band is white	GL34A	GL34B	GL34D	GL34G	GL34J		
Maximum Recurrent 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 _T =75°C	I _(AV)	0.5					Amps
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				1.3	Volts
Maximum DC Reverse Current T _A =25°C at Rated DC Blocking Voltage T _A =125°C	I _R	5.0 50.0					μA
Maximum Full Load Reverse Current, Full Cycle Average at T _A =75°C	I _{R(AV)}	20					μA
Typical Junction Capacitance (NOTE 1)	C _J	7.0					pF
Maximum Thermal Resistance R _{thJL} (NOTE 2) R _{thJA} (NOTE 3)	R _{θJL} R _{θJA}	70.0 150.0					°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-65 to +175					°C
Polarity Color Bands (2 nd Band)		Gray	Red	Orange	Yellow	Green	

NOTES: 1. Measured at 1 MHz and applied reverse voltage of 4.0 V_{DC}.
2. Thermal resistance junction to terminal, 5.0mm² copper pads to each terminal.
3. Thermal resistance junction to ambient, 5.0mm² copper pads to each terminal.

**RATINGS AND CHARACTERISTIC CURVES BYM05-50 THRU BYM05-600
GL34A THRU GL34J**

FIG. 1 — FORWARD CURRENT DERATING CURVE

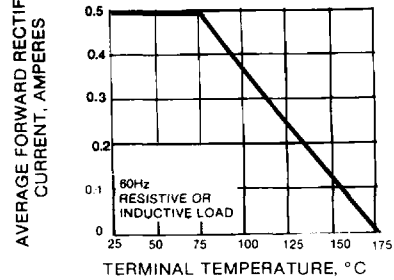


FIG. 2 — MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

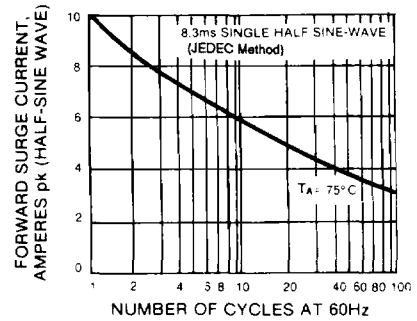


FIG. 3 — TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

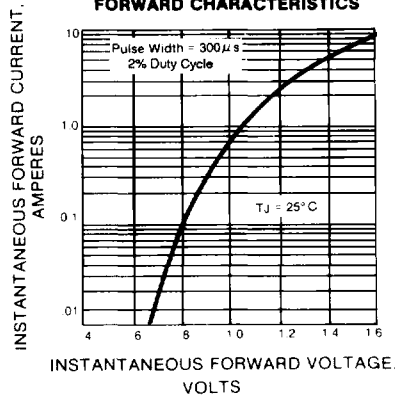


FIG. 4 — TYPICAL JUNCTION CAPACITANCE

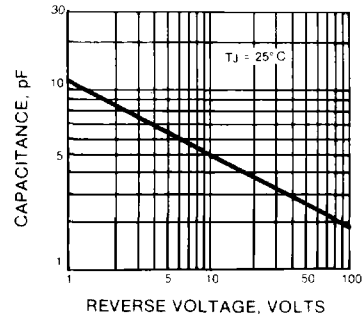


FIG. 5 — TYPICAL REVERSE CHARACTERISTICS

