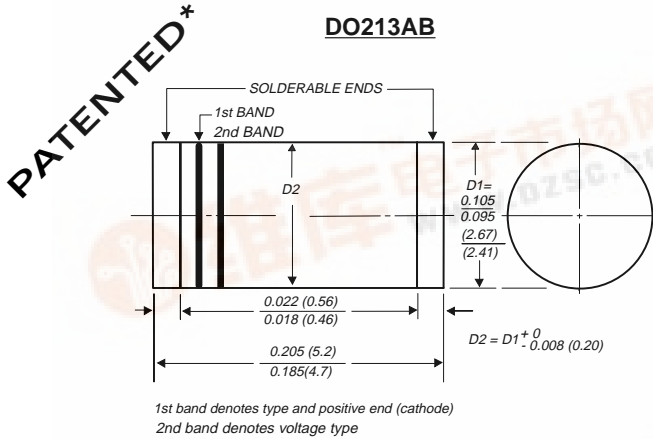


# BYM10-50 THRU BYM10-1000 GL41A THRU GL41Y

**SURFACE MOUNT GLASS PASSIVATED JUNCTION RECTIFIER**  
Reverse Voltage - 50 to 1600 Volts      Forward Current - 1.0 Ampere



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

## FEATURES

- ♦ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ♦ Capable of meeting environmental standards of MIL-S-19500
- ♦ For surface mount applications
- ♦ High temperature metallurgically bonded construction
- ♦ Glass passivated cavity-free 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 ounce, 0.116 gram

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	BYM10				BYM10					UNITS
		-50 GL41A	-100 GL41B	-200 GL41D	-400 GL41G	-600 GL41J	-800 GL41K	-1000 GL41M	GL41T	GL41Y	
Standard recovery device: 1st band is white		Gray	Red	Orange	Yellow	Green	Blue	Violet	White	Brown	
Polarity color bands (2nd Band)		Gray	Red	Orange	Yellow	Green	Blue	Violet	White	Brown	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	1300	1600	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	910	1120	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	1300	1600	Volts
Maximum average forward rectified current (SEE FIG. 1)	I(AV)	1.0									Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30.0									Amps
Maximum instantaneous forward voltage at 1.0A	V <sub>F</sub>	1.1				1.2					Volts
Maximum DC reverse current at rated DC blocking voltage T <sub>A</sub> =25°C T <sub>A</sub> =125°C	I <sub>R</sub>					10.0 50.0					µA
Maximum full load reverse current full cycle average at T <sub>A</sub> =75°C	I <sub>R(AV)</sub>	30.0									µA
Typical junction capacitance (NOTE 1)	C <sub>J</sub>	8.0									pF
Typical thermal resistance (NOTE 2) (NOTE 3)	R <sub>θJA</sub> R <sub>θJT</sub>					75.0 30.0					°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175									°C

(1) Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC  
(2) Thermal resistance from junction to ambient, 0.24 x 0.24" (6.0 x 6.0mm) copper pads to each terminal

# RATINGS AND CHARACTERISTIC CURVES BYM10-50 THRU BYM10-600 / GL41A THRU GL41Y

FIG. 1 - FORWARD CURRENT DERATING CURVE

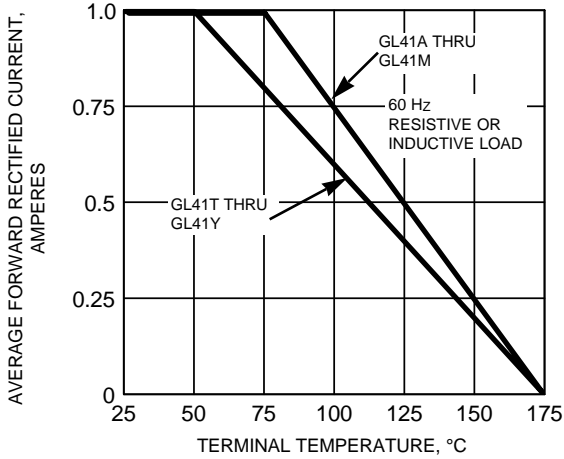


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

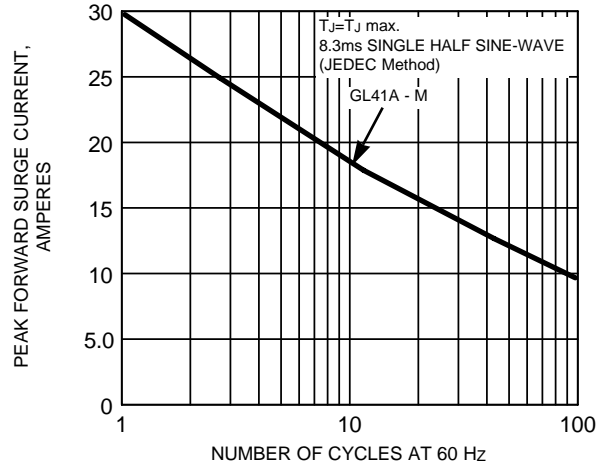


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

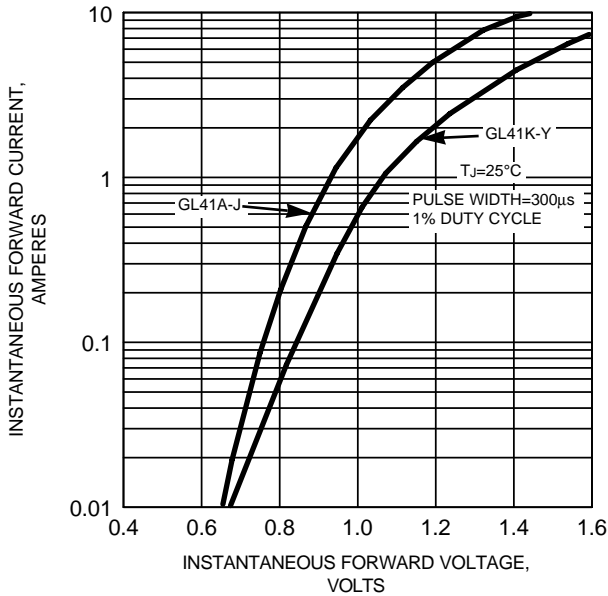


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

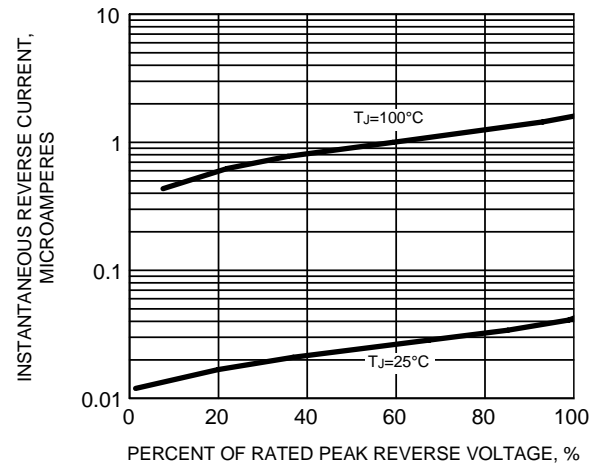


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

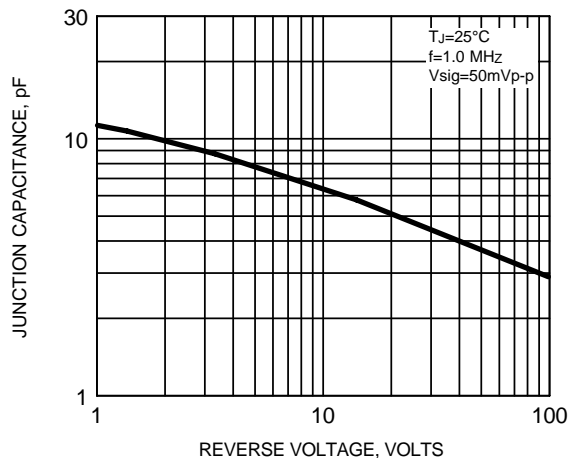


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

