

# Silicon Diode

## **BYM10-400**

400V / 1A

# DATASHEET

from

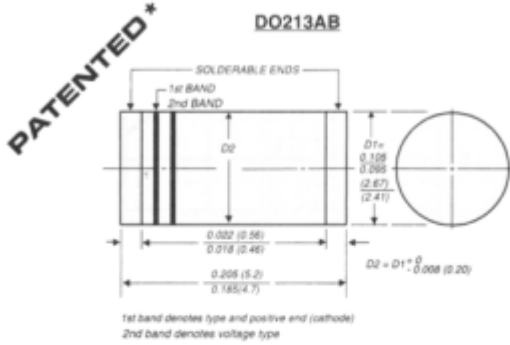
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OEM – General Semiconductor

Source: General Semiconductor Databook 1998

# 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



1st band denotes type and positive end (cathode)  
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



### 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											
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 <sub>(AV)</sub>	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	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

**NOTES:**

- (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
- (3) Thermal resistance from junction to terminal, 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**

