

Silicon Diode

GL41A

50V / 1A

DATASHEET

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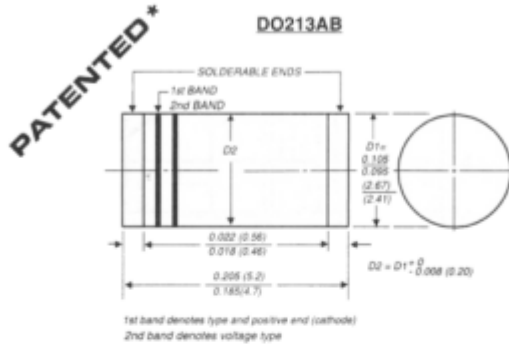
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OEM – General Semiconductor

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



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 _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | 1300 | 1600 | Volts |
| Maximum RMS voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | 910 | 1120 | Volts |
| Maximum DC blocking voltage | V _{DC} | 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 _{FSM} | 30.0 | | | | | | | | | Amps |
| Maximum instantaneous forward voltage at 1.0A | V _F | 1.1 | | | | 1.2 | | | | | Volts |
| Maximum DC reverse current at rated DC blocking voltage T _A =25°C T _A =125°C | I _R | 10.0 50.0 | | | | | | | | | µA |
| Maximum full load reverse current full cycle average at T _A =75°C | I _{R(AV)} | 30.0 | | | | | | | | | µA |
| Typical junction capacitance (NOTE 1) | C _J | 8.0 | | | | | | | | | pF |
| Typical thermal resistance (NOTE 2) (NOTE 3) | R _{θJA} R _{θJT} | 75.0 30.0 | | | | | | | | | °C/W |
| Operating junction and storage temperature range | T _J , T _{STG} | -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

