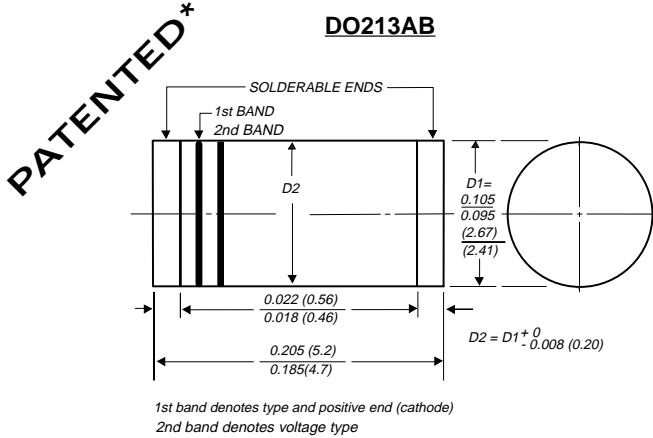


BYM10-50 THRU BYM10-1000 GL41A THRU GL41Y

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

SUPERRECTIFIER

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	
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 V_{DC}
- (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

 **GENERAL
SEMICONDUCTOR**

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

FIG. 1 - FORWARD CURRENT DERATING CURVE

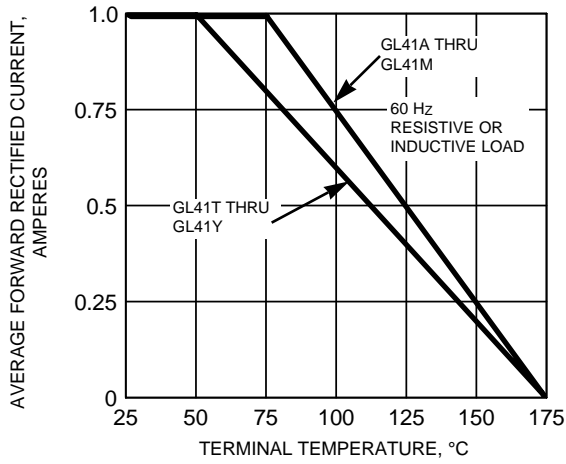


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

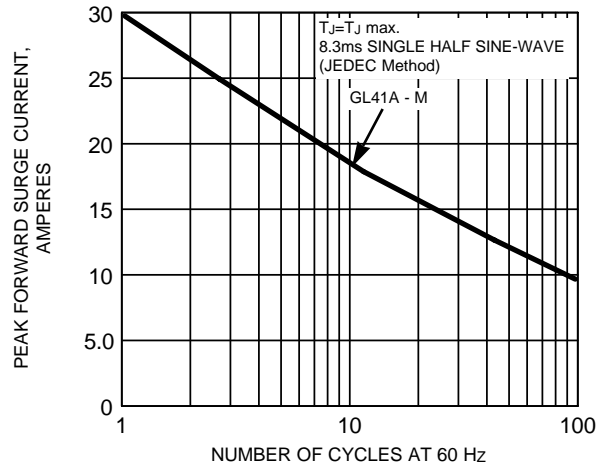


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

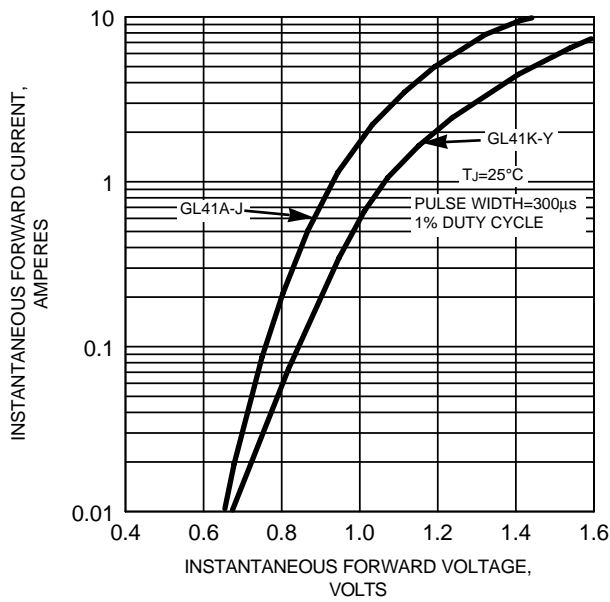


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

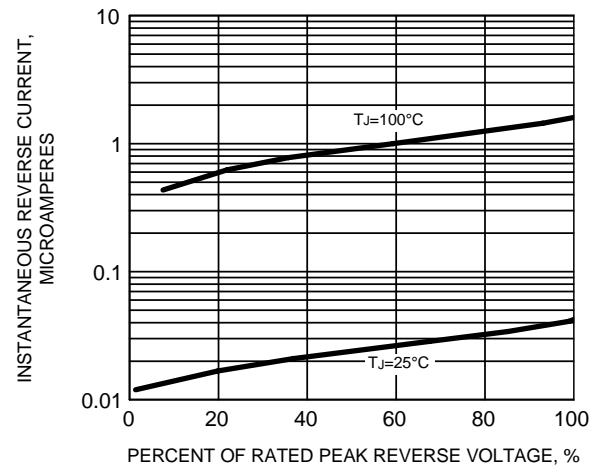


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

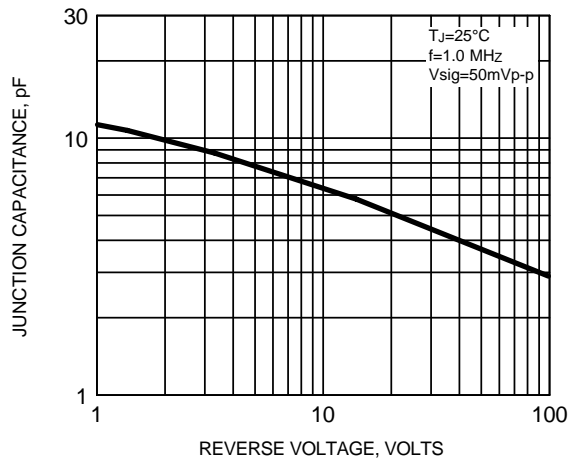


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

