

# Silicon Diode

## **BYM07-150**

Fast Efficient Rectifier

150V / 0,5A

# DATASHEET

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OEM – General Semiconductor

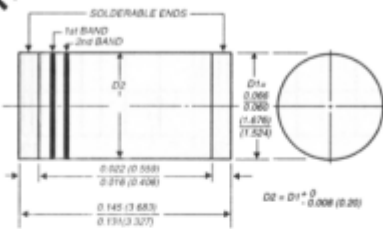
Source: General Semiconductor Databook 1998

# BYM07-50 THRU BYM07-400 EGL34A THRU EGL34G

**SURFACE MOUNT GLASS PASSIVATED JUNCTION FAST EFFICIENT RECTIFIER**  
*Reverse Voltage - 50 to 400 Volts      Forward Current - 0.5 Ampere*

**PATENTED \***

DO-213AA



1st band denotes type and polarity  
2nd band denotes voltage type

Dimensions in inches and (millimeters)

\* Glass-plastic encapsulation is covered by

Patent No. 3,996,602 and brazed-lead assembly to 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
- ◆ Fast switching for high efficiency
- ◆ 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:** JEDEC DO-213AA 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:** 0.0014 ounce, 0.036 gram

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	BYM07 -50	BYM07 -100	BYM07 -150	BYM07 -200	BYM07 -300	BYM07 -400	UNITS	
Fast efficient device: 1st band is Green		EGL34A	EGL34B	EGL34C	EGL34D	EGL34F	EGL34G		
Polarity color bands (2nd Band)		GRAY	RED	PINK	ORANGE	BROWN	YELLOW		
Maximum repetitive peak reverse voltage	VRRM	50	100	150	200	300	400	Volts	
Maximum RMS voltage	VRMS	35	70	105	140	210	280	Volts	
Maximum DC blocking voltage	VDC	50	100	150	200	300	400	Volts	
Maximum average forward rectified current at T <sub>T</sub> =75°C	I(AV)	0.5							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	10.0							Amps
Maximum instantaneous forward voltage at 0.5A	V <sub>F</sub>				1.25	1.35		Volts	
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>				5.0			μA	
					50.0				
Maximum full load reverse current, full cycle average at T <sub>A</sub> =55°C	I <sub>R(AV)</sub>				50.0			μA	
Maximum reverse recovery time (NOTE 1)	t <sub>rr</sub>				50.0			ns	
Typical junction capacitance (NOTE 2)	C <sub>J</sub>				7.0			pF	
Maximum thermal resistance (NOTE 3)	R <sub>θJA</sub>				150.0			°C/W	
(NOTE 4)	R <sub>θJT</sub>				70.0				
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175							°C

**NOTES:**

(1) Reverse recovery test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>SM</sub>=0.25A

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(3) Thermal resistance from junction to ambient, 0.24 x 0.24" (6.0 x 6.0mm) copper pads to each terminal

(4) 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 BYM07-50 THRU BYM07-400 / EGL34A THRU EGL34G**

