

Silicon Diode

BYM07-50

Fast Efficient Rectifier

50V / 0,5A

DATASHEET

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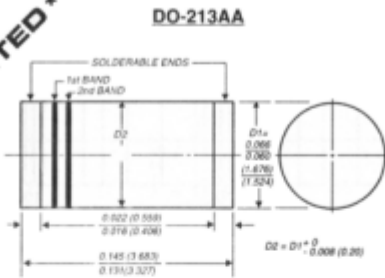
OEM – General Semiconductor

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 *



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 _T =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 _F				1.25	1.35		Volts
Maximum DC reverse current at rated DC blocking voltage	I _R				5.0			μA
					50.0			
Maximum full load reverse current, full cycle average at T _A =55°C	I _{R(AV)}				50.0			μA
Maximum reverse recovery time (NOTE 1)	t _{rr}				50.0			ns
Typical junction capacitance (NOTE 2)	C _J				7.0			pF
Maximum thermal resistance (NOTE 3)	R _{θJA}				150.0			°C/W
(NOTE 4)	R _{θJT}				70.0			
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +175						°C

NOTES:

(1) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{SM}=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

