

BYM12-50 THRU BYM12-400 EGL41A THRU EGL41G

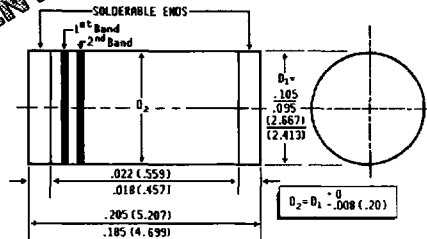
SURFACE MOUNT GLASS PASSIVATED FAST EFFICIENT JUNCTION RECTIFIER

Voltage - 50 to 400 Volts Current - 1.0 Ampere

FEATURES

PATENTED*

DO-213AB



Dimensions in inches and (millimeters)

*Glass-plastic encapsulation technique is covered by Patent No. 3,906,602 of 1976; brazed-lead assembly to Patent No. 3,930,306 of 1976

- ◆ For surface mounted applications
- ◆ High temperature metallurgically bonded
- ◆ Glass passivated junction
- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Superfast recovery times for high efficiency
- ◆ Capable of meeting environmental standards of MIL-S-19500
- ◆ Ultra fast switching for high efficiency
- ◆ 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: Molded plastic over glass

Terminals: Solderable per MIL-STD-750, Method 2026

Polarity: Two bands indicate cathode

1st band denoted device type 2nd band denotes voltage type

Mounting Position: Any **Handling Precautions:** None

Weight: 0.116 gram, 0.0046 ounce

SUPERRECTIFIER®

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load.

	SYMBOLS	BYM12						UNITS
		-50	-100	-150	-200	300	-400	
Fast efficient devices: 1 st band is green		EGL 41A	EGL 41B	EGL 41C	EGL 41D	EGL 41F	EGL 41G	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	Volts
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	Volts
Maximum Average Forward Rectified Current at T _J =75°C	I _(AV)	1.0						Amps
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	1.0			1.25			Volts
Maximum DC Reverse Current T _A =25°C	I _R	5.0						µA
at Rated DC Blocking Voltage T _A =125°C	I _R	50.0						µA
Maximum Reverse Recovery Time (NOTE 1) T _J =25°C	T _{RR}	50						nS
Typical Junction Capacitance (NOTE 2)	C _J	15.0						pF
Maximum Thermal Resistance R _{thJL} (NOTE 3)	R _{θJL}	30.0						°C/W
R _{thJA} (NOTE 4)	R _{θJA}	60.0						°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-65 to +175						°C
Polarity Color Bands (2 nd Band)		Gray	Red	Pink	Orange	Brown	Yellow	

NOTES:

1. Reverse Recovery Test Conditions: I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A.
2. Measured at 1 MHz and applied reverse voltage of 4.0 Volts.
3. Thermal resistance junction to terminal, 6.0mm² copper pads to each terminal.
4. Thermal resistance junction to ambient, 6.0mm² copper pads to each terminal.

**RATINGS AND CHARACTERISTIC CURVES BYM12-50 THRU BYM12-400
EGL41A THRU EGL41G**

