

BYM07-50 thru BYM07-400 EGL34A thru EGL34G

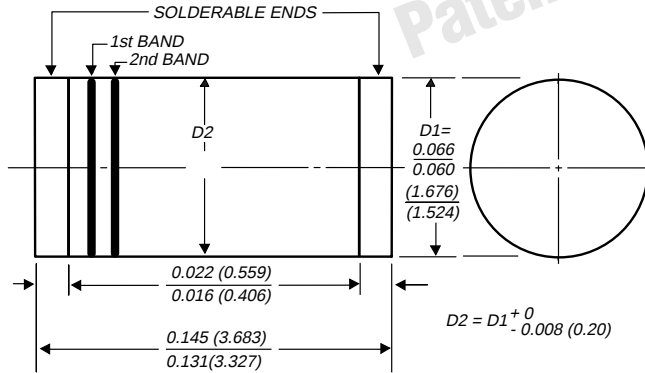
Surface Mount Glass Passivated Ultrafast Rectifier



DO-213AA

Reverse Voltage 50 to 400V

Forward Current 0.5A



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 Laboratories Flammability Classification 94V-0
- Capable of meeting environmental standards of MIL-S-19500
- For surface mount applications
- High temperature metallurgically bonded construction
- Cavity-free glass passivated 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:** 0.0014oz, 0.036g

Maximum Ratings & Thermal 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	V _{RRM}	50	100	150	200	300	400	V
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	V
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	V
Maximum average forward rectified current at T _T =75°C	I _{F(AV)}	0.5						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	10						A
Maximum full load reverse current, full cycle average at T _A =55°C	I _{R(AV)}	50						μA
Maximum thermal resistance (NOTE 1)	R _{θJA}	150						°C/W
(NOTE 2)	R _{θJT}	70						
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +175						°C

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
		EGL34A	EGL34B	EGL34C	EGL34D	EGL34F	EGL34G	
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =125°C	I _R	5.0 50						μA
Maximum instantaneous forward voltage at 0.5A	V _F	1.25 1.35						V
Maximum reverse recovery time at I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	t _{rr}	50						ns
Typical junction capacitance at 4.0V, 1MHz	C _J	7.0						pF

NOTES:

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

(2) 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 (T_A = 25°C unless otherwise noted)

FIG. 1 - FORWARD CURRENT DERATING CURVE

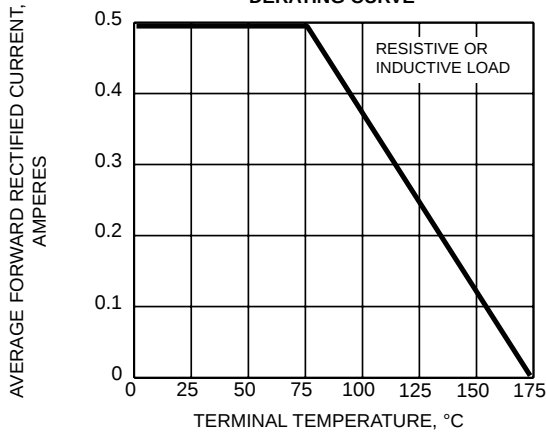


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

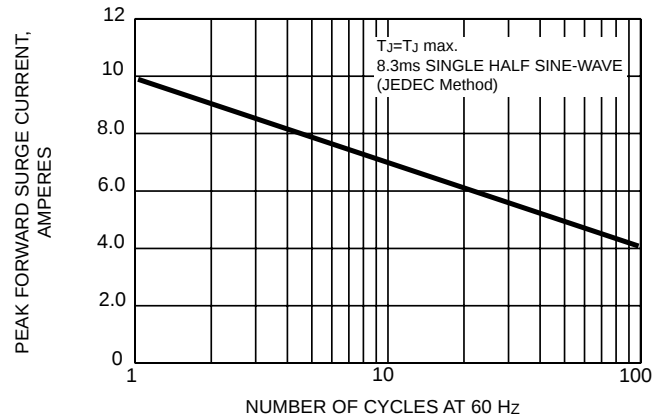


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

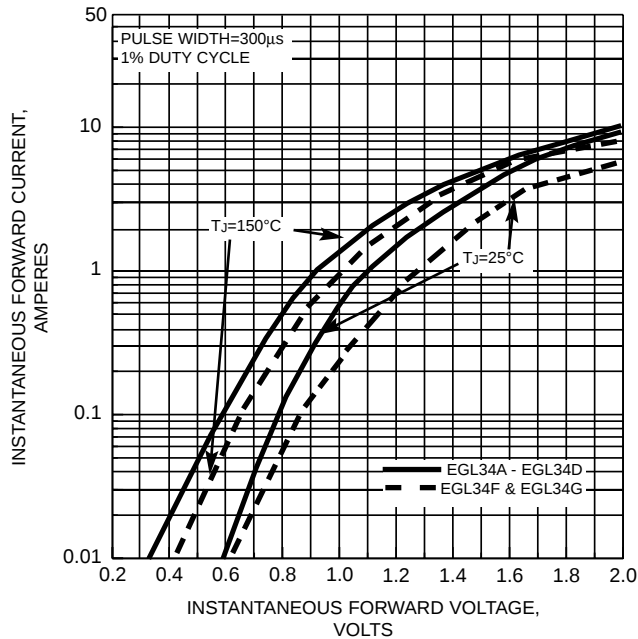


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

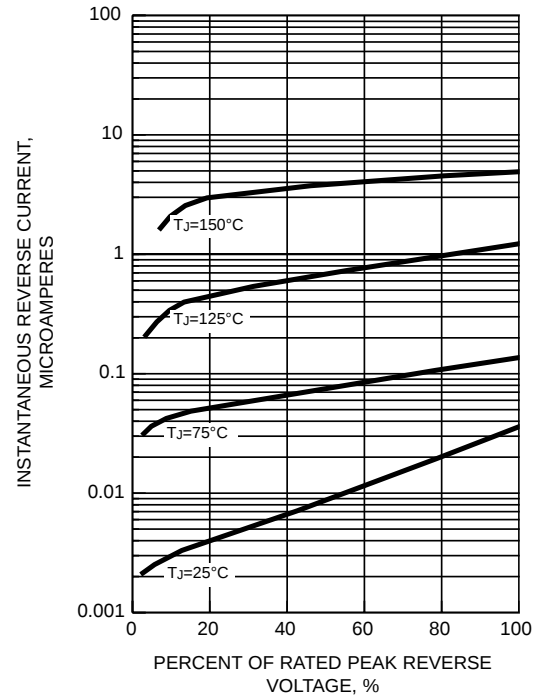


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

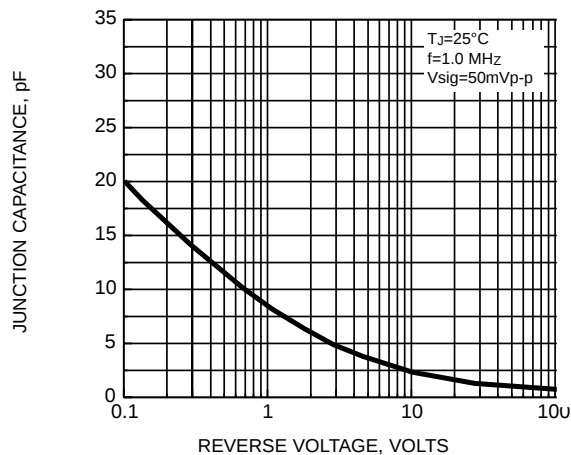


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

