

EGL34A THRU EGL34G

SURFACE MOUNT GLASS PASSIVATED ULTRAFAST RECTIFIER

Reverse Voltage - 50 to 400 V

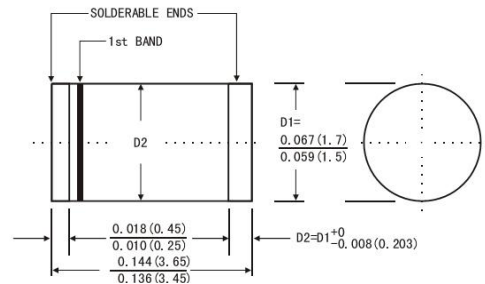
Forward Current - 0.5 A

Features

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- High temperature metallurgically bonded construction
- Cavity-free glass passivated junction
- Fast switching for high efficiency

Mechanical Data

- Case: MiniMELF (DO-213AA), molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MiniMELF (DO-213AA) Plastic Package

Absolute Maximum Ratings and Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

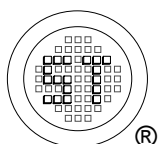
Parameter	Symbols	EGL34A	EGL34B	EGL34C	EGL34D	EGL34F	EGL34G	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	V
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	V
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	V
Maximum Average Forward Rectified Current at T _T = 75 °C	I _{F(AV)}	0.5						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	10						A
Maximum Forward Voltage at 0.5 A	V _F	1.25				1.35		V
Maximum Reverse Current at Rated DC Blocking Voltage T _A = 25 °C T _A = 125 °C	I _R	5 50						µA
Maximum Reverse recovery time ¹⁾	t _{rr}	50						ns
Typical Junction Capacitance ²⁾	C _J	7						pF
Typical Thermal Resistance ^{3), 4)}	R _{θJA} R _{θJT}	150 70						°C/W
Operating and Storage Temperature Range	T _j , T _{stg}	- 65 to + 175						°C

¹⁾ Test conditions: $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $t_{rr} = 0.25\text{ A}$

²⁾ Measured at 1 MHz and applied reverse voltage of 4 VDC.

³⁾ Thermal resistance from junction to ambient, 0.24" X 0.24" (6 X 6 mm) copper pads to each terminals.

⁴⁾ Thermal resistance from junction to terminal, 0.24" X 0.24" (6 X 6 mm) copper pads to each terminals.



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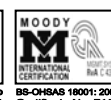
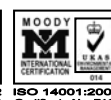
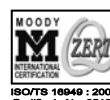


Fig. 1 – Forward Current Derating Curve

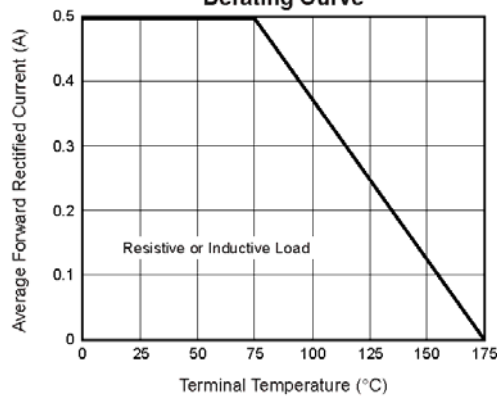


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

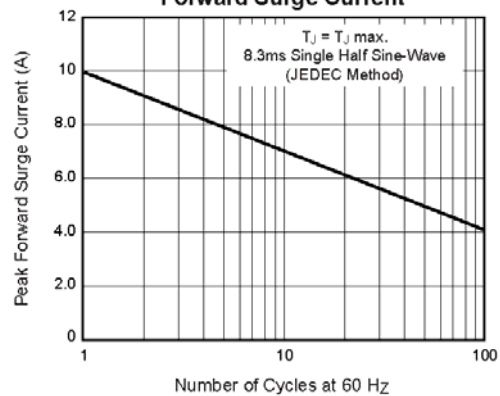


Fig. 3 – Typical Instantaneous Forward Characteristics

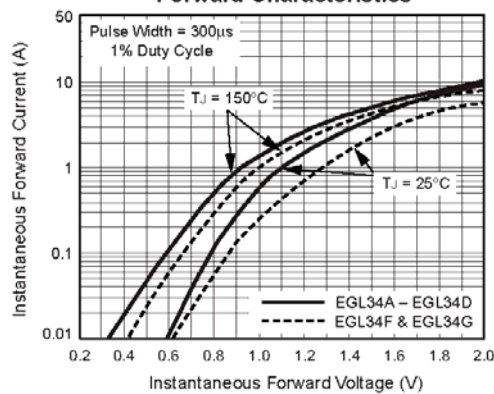


Fig. 4 – Typical Reverse Characteristics

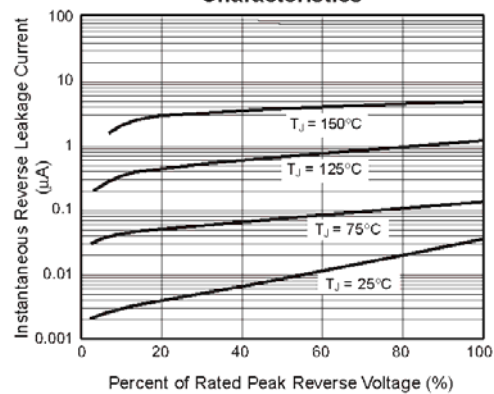


Fig. 5 – Typical Junction Capacitance

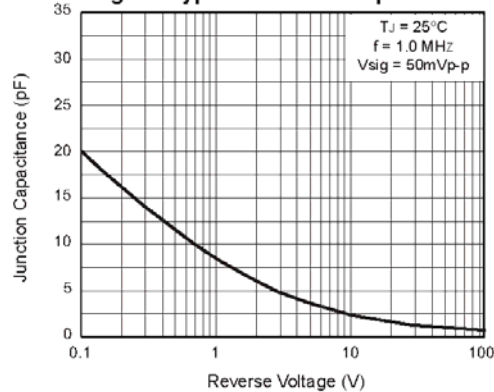
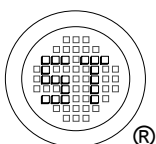
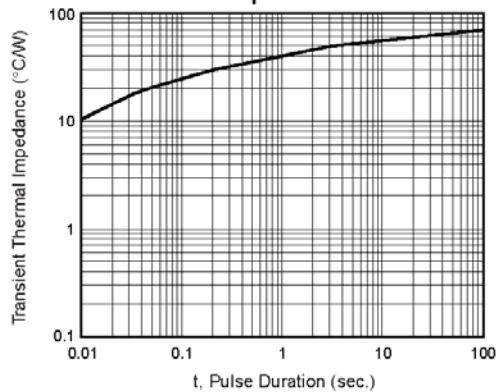


Fig. 6 – Typical Transient Thermal Impedance



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