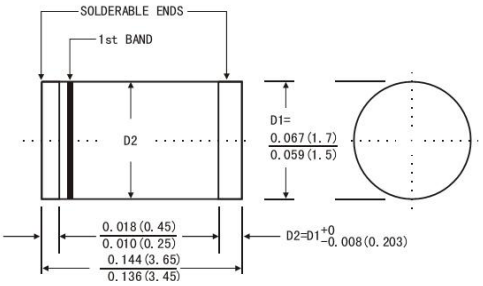
EGL34A THRU EGL34G

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



MiniMELF (DO-213AA) Plastic Package

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

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 T_A = 25 °C at Rated DC Blocking Voltage 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]	$R_{\theta JA}$ $R_{\theta JT}$	150 70						°C/W
Operating and Storage Temperature Range	T_j , T_{stg}	- 65 to + 175						°C

[1] Test conditions: I_F = 0.5 A, I_R = 1 A, I_{rr} = 0.25 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.

Fig. 1 – Forward Current Derating Curve

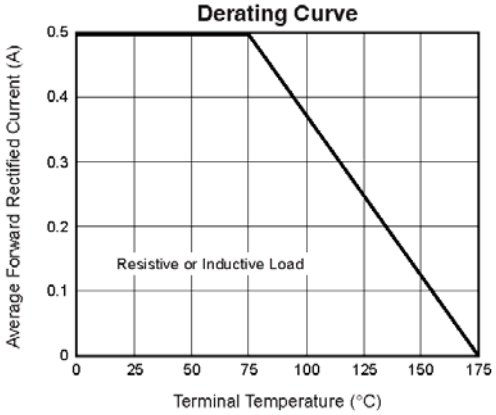


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

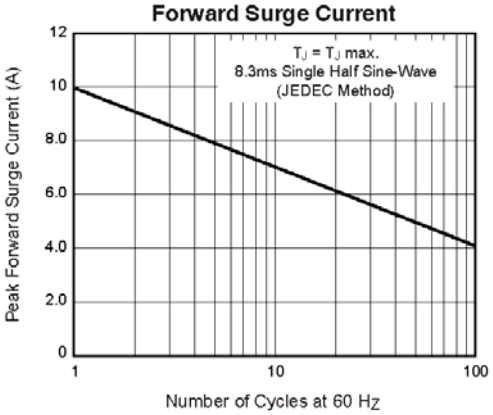


Fig. 3 – Typical Instantaneous Forward Characteristics

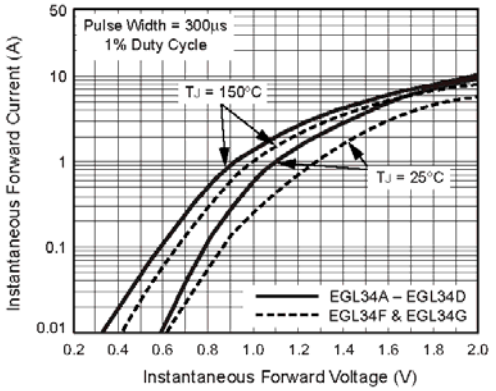


Fig. 4 – Typical Reverse Characteristics

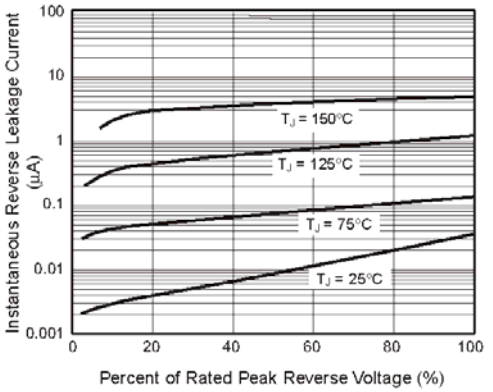


Fig. 5 – Typical Junction Capacitance

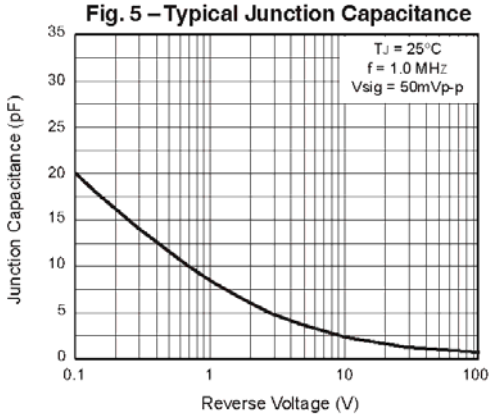


Fig. 6 – Typical Transient Thermal Impedance