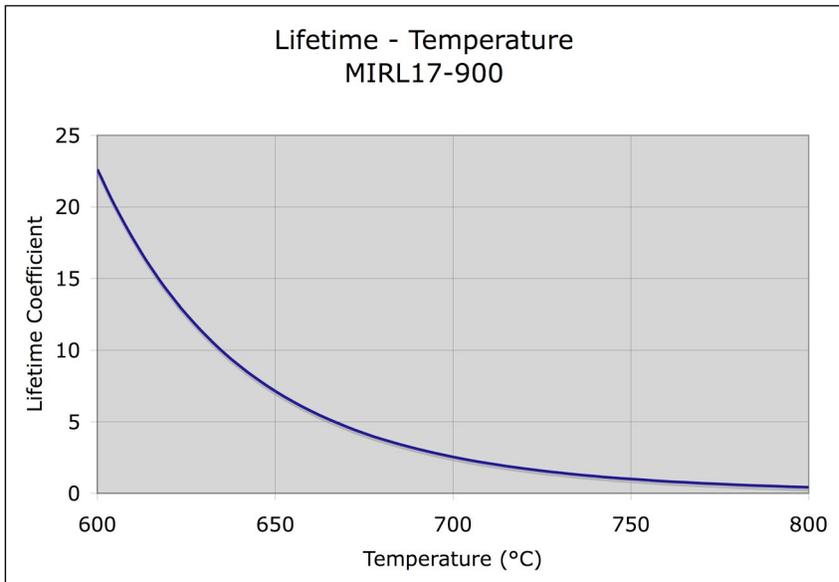




Effect of Membrane Temperature on Lifetime for MIRL17-900 Infrared Emitters

Dependence of operating life of the MIRL17-900 referenced to the lifetime at 750°C (=1). The measurements are at 10 Hz, 50% duty cycle with the emitter open to ambient air. From the plot it can be seen that lowering the temperature to 600°C results in an increase in lifetime by more than a factor of 10. Increasing the membrane temperature to 800°C decreases the lifetime by a factor of 2. The lifetime at 750°C is >5000 hours.



Dependence of membrane temperature on electrical input power for the MIRL17-900. The measurements are at 10 Hz, 50% duty cycle with the emitter open to ambient air.

