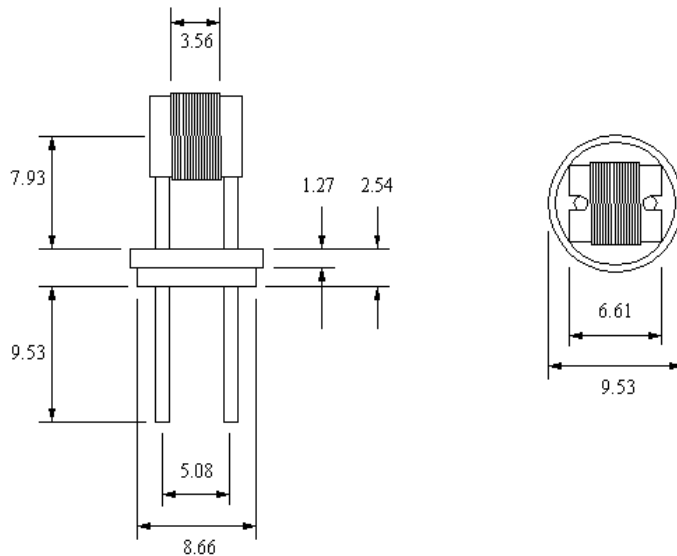


IR-12 Series

Miniature 9 Watt Infrared Emitter

This IR source is a thermal emitter with emissivity ~0.8. It is appropriate for use in lab or field instrumentation due to its long life and stable properties.



The coiled resistance wire filament IR-12 operates at 825°C (1100K) when powered with 4.5 volts @ 1.8 amps (8 watts). The IR-12K takes higher electrical power and runs hotter. Emissivity is ~80% in the IR. The coil is wound on a cylindrical alumina substrate. Operation in a controlled or sealed atmosphere is not required.

The emitter coil is mounted horizontally on an 8.5 mm dia. base. The emitter support pins also are the power leads and are sealed in glass.

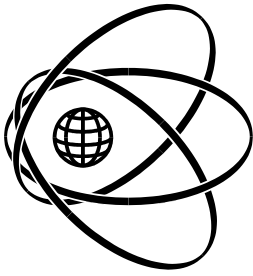
Dimensions in mm

The Series IR-12 is offered as follows:

Part #	Description	For Long Service Life (Temp @ Volts, Amps)	Recommended Upper Limit
IR-12	Standard unit – power approx 8 watts at 825C	825C @ ~4.5V, 1.8 A Lifetime > 3 years	1025C at ~6V, 2.4 A
IR-12K	Mechanically identical to standard unit but capable of higher temp operation	1050C @ ~6.5V, 2.0 A Lifetime > 3 years	1275C at ~8V, 2.5 A

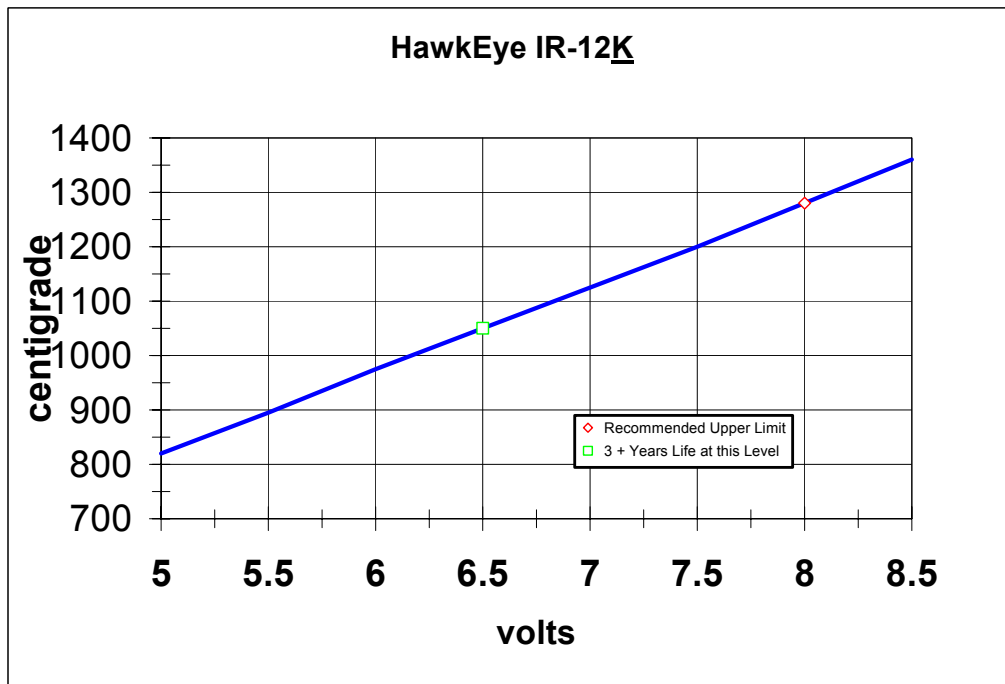
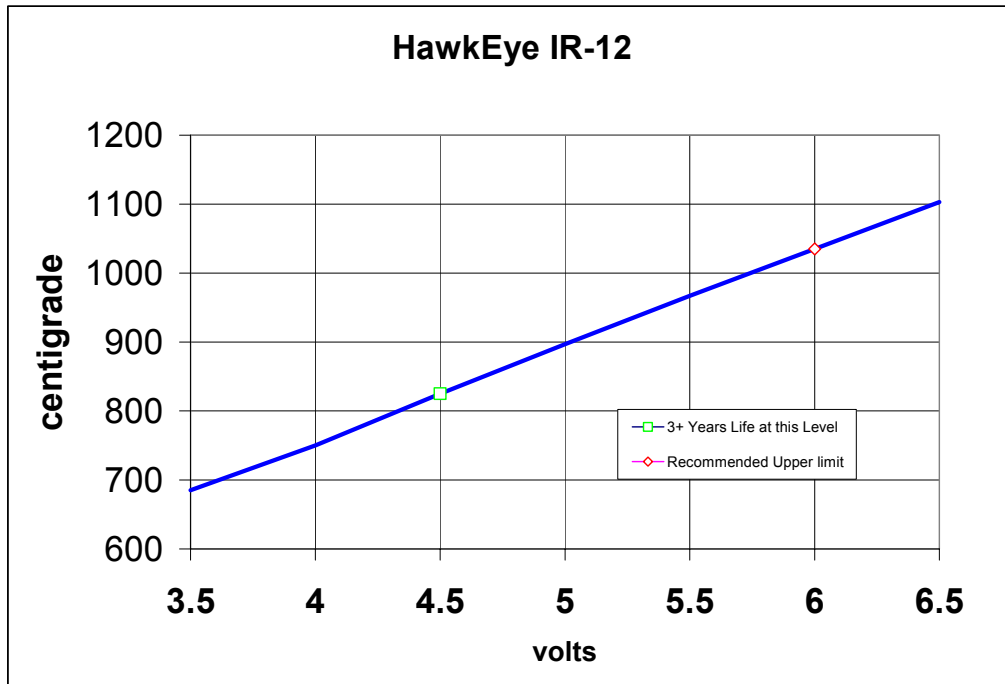
Boston Electronics can also supply custom designed miniature IR blackbody sources. Please inquire.





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Current versus temperature for the IR-12 and IR-12K. Note the indicated values for 3⁺-year CW lifetime and for maximum intermittent use at reduced lifetime.