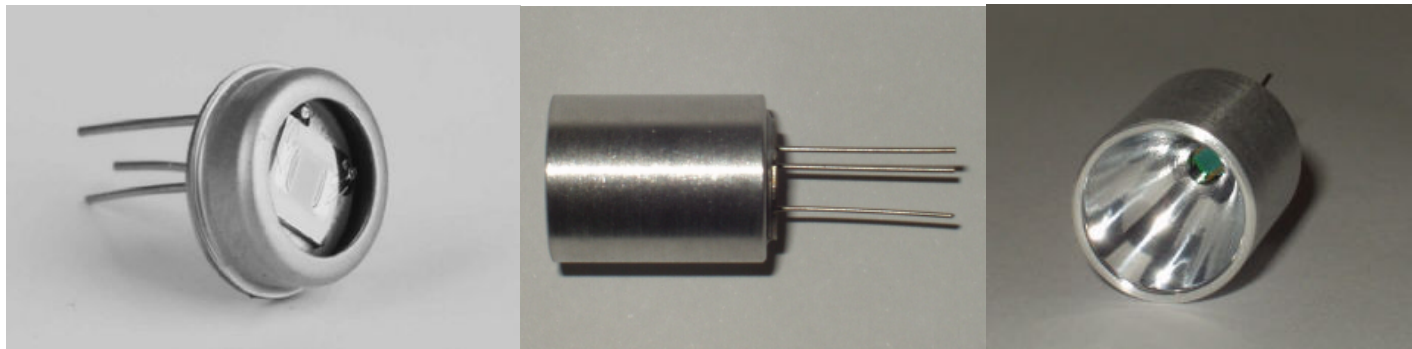


SERIES 50

THIN FILM 0.9 WATT INFRA-RED EMITTER

The IR-50 range of infra red sources is based around a very low thermal mass diamond-like carbon thin film element. Due to the low thermal mass, the infra red source can be pulsed at frequencies up to 100Hz with good modulation depth, or contrast between the on and off states. It is therefore suitable for use with quantum detectors like photoconductive PbS and PbSe, which otherwise would require a chopper to avoid excess low frequency "flicker" (1/f) noise.



This source is significantly better, watt for watt and Hz for Hz, than any competing non-mechanical modulation technology offers. This new source has an active area of approximately 1.5 mm² and is supplied in a TO-5 style package. The normal working range is 500° to 750°C with peak short term heating up to 850°C possible. Calculated lifetime is approximately three years.

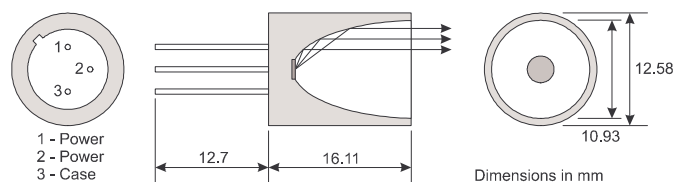
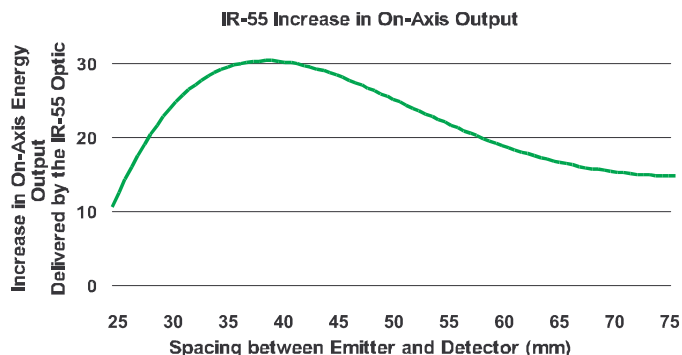


The Series 50 is offered as follows:

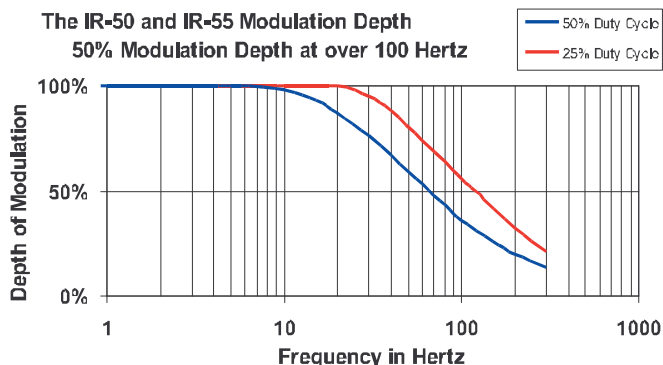
Part #	Description
IR 50	IR Source mounted in a TO5 header
IR 55	IR Source mounted with a Parabolic Reflector

Normal Operating Specifications:

Temperature	750°C (1025K)
Voltage	6.4 volts RMS (AC or DC)
Current	0.135 Amps
Active Area	1.5 x 1.5 mm
Modulation Rate	Up to 100 Hz
Lifetime	3+ years at 750°C, typical



IR-55 Drawing



Scitec Instruments Ltd
 Bartles Industrial Estate
 North Street
 Redruth
 Cornwall TR15 1HR
 United Kingdom

t. +44 [0]1209 314608
 f. +44 [0]1209 314609
 f2. +44 [0]870 1600860
 i. www.scitec.uk.com
 e. scitec@scitec.uk.com

