

Peak Emission Wavelength: 850nm

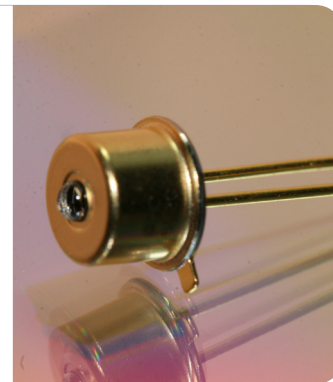
The 850nm IR emitter series is designed for applications requiring high output and precise optical / mechanical axis alignment. Custom package solutions and sorting are available.

FEATURES

- > Metal Can Package
- > High Output Power
- > Point source emitter, 50um diameter glass ball

APPLICATIONS

- > Optical Switches
- > Security Systems
- > Fiber Optical Communications



Absolute Maximum Ratings (Ta=25°C)

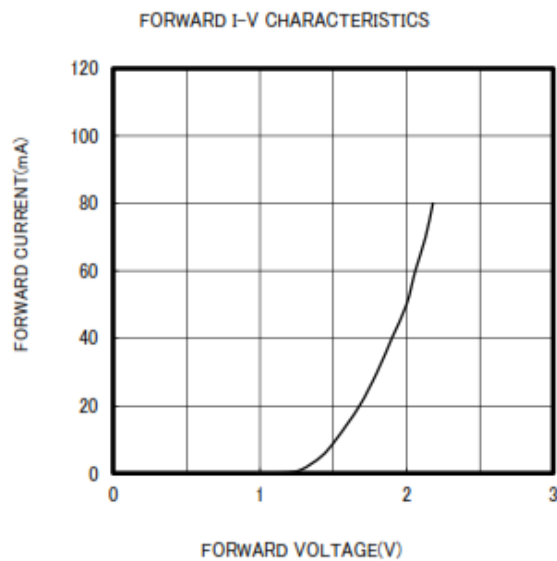
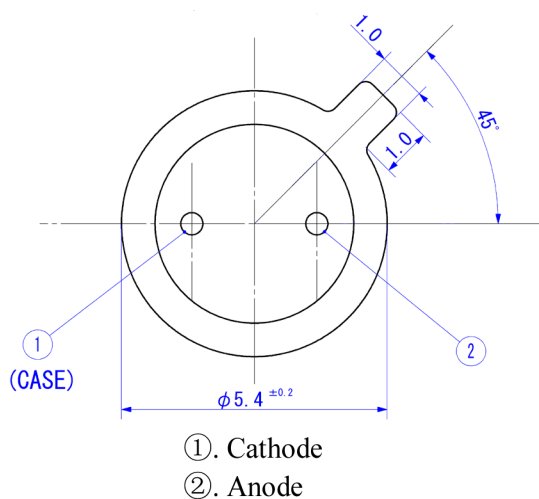
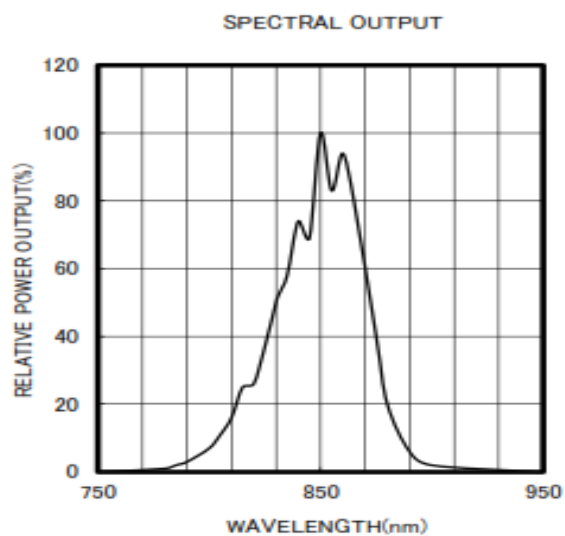
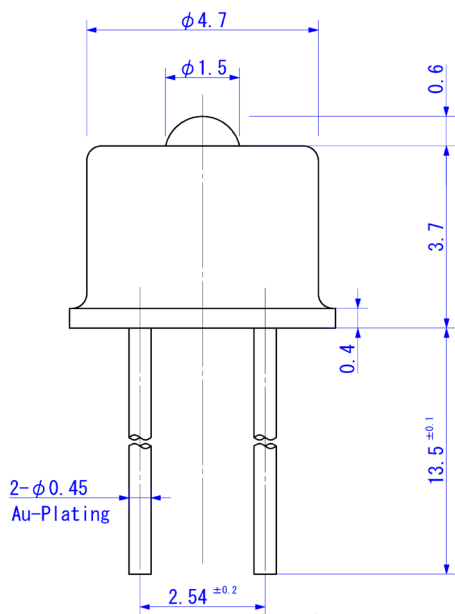


ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	80	mA
Forward Current (Pulse)*1	IFP	0.4	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	150	mW
Operating Temperature Range	Topr	-30 ~ +85	°C
Storage Temperature Range	Tstg	-40 ~ +100	°C
Lead Soldering Temperature*2	Tls	260	°C

*1: Tw=10μsec, T=10msec; *2: Time 5 Sec max, Position: Up to 3mm from the body.

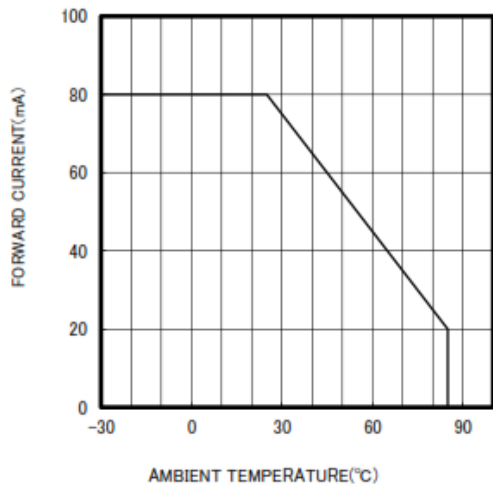
Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=50mA	2.5	3.4	--	mW
Forward Voltage	VF	IF=50mA	--	2.0	2.4	V
Reverse Current	IR	VR=5V	--	--	10	μA
Peak Emission Wavelength	λp	IF=50mA	--	850	--	nm
Spectral Line Half Width	Δλ	IF=50mA	--	45	--	nm
Half Intensity Beam Angle	Θ	IF=50mA	--	±15	--	deg
Switching Times	Tr, Tf	IF=20mA	--	5~7	--	ns

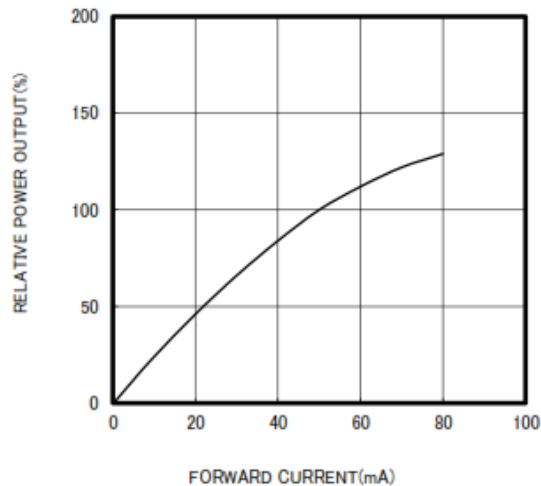


Unit: mm, Tolerance: ± 0.2

THERMAL DERATING CURVE



RELATIVE POWER vs FORWARD CURRENT



RADIATION PATTERN

