Optrans

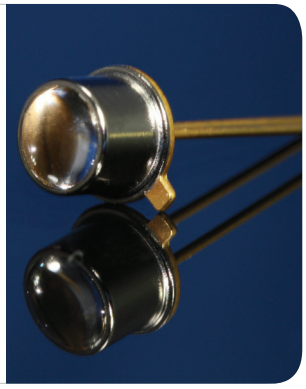
Preliminary

Visible Emitter

Product No: **VS429NNM1-WRC**

Peak Emission Wavelength: 420nm

The 420nm visible emitter series is designed for applications requiring high output and precise optical / mechanical axis alignment. Custom package solutions and sorting are available.



FEATURES

> Hermetically Sealed TO-46
> High Output Power
> Narrow Beam Angle
> High Reliability

APPLICATIONS

> Color Sensor / Money Bill
> Paper Sensor / Money Bill
> Bar-code Reader

Absolute Maximum Ratings (Ta=25°C)

ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	50	mA
Forward Current (Pulse)*1	IFP	0.5	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	150	mW
Operating Temperature Range	Topr	-20 ~ +85	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C
Junction Temperature	Tj	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=20mA	--	11.2	--	mW
Forward Voltage	VF	IF=20mA	--	2.9	3.0	V
Reverse Current	IR	VR=5V	--	--	100	μA
Peak Emission Wavelength	λp	IF=20mA	--	420	--	nm
Spectral Line Half Width	Δλ	IF=20mA	--	17	--	nm
Half Intensity Beam Angle	$\Theta_{1/2}$	IF=20mA	--	±9	--	deg

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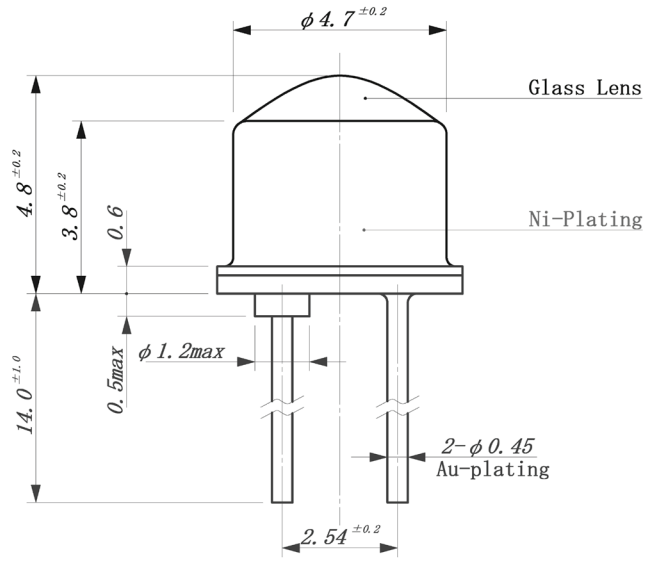
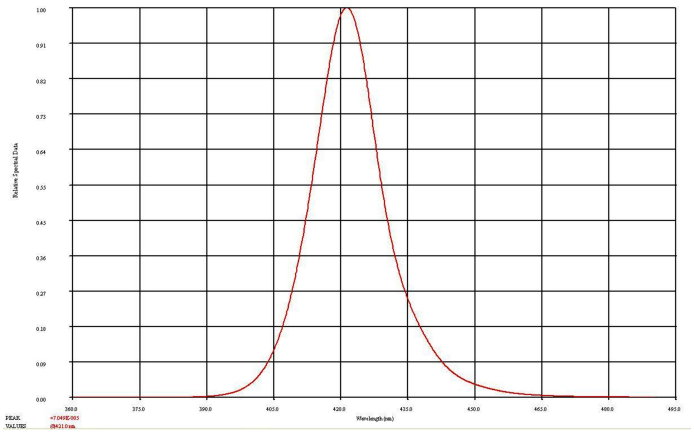
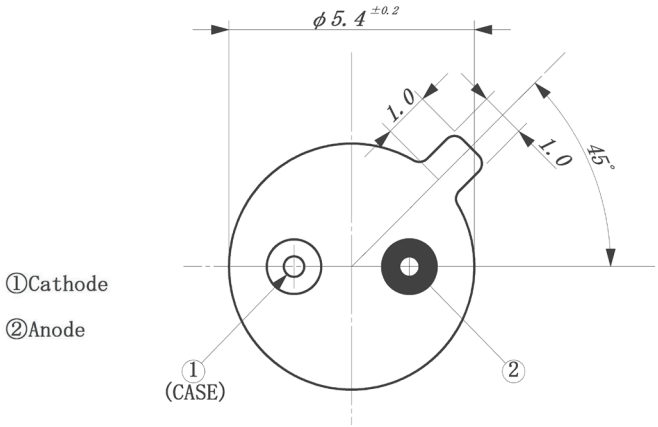
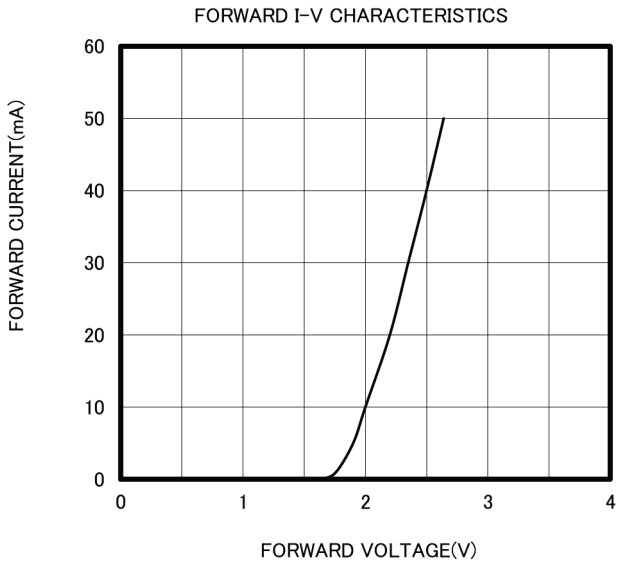


Spectral Plot







Unit: mm, Tolerance: ±0.2

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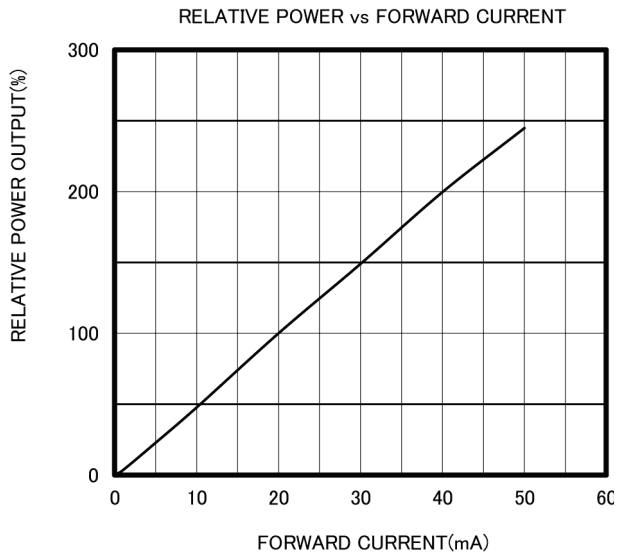
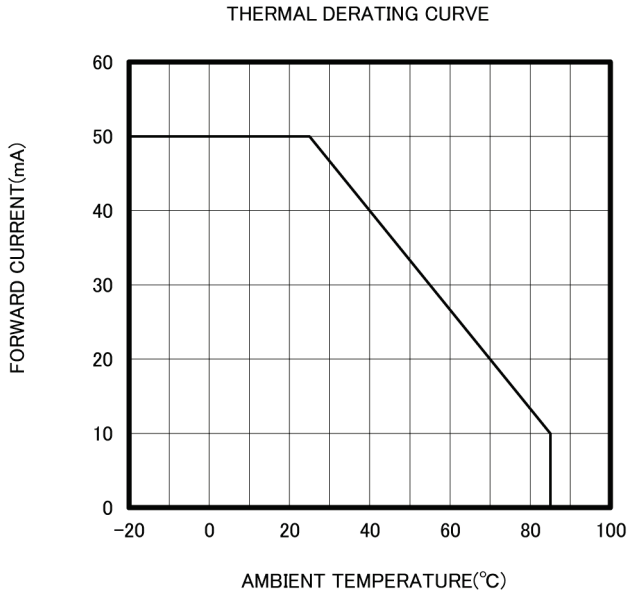
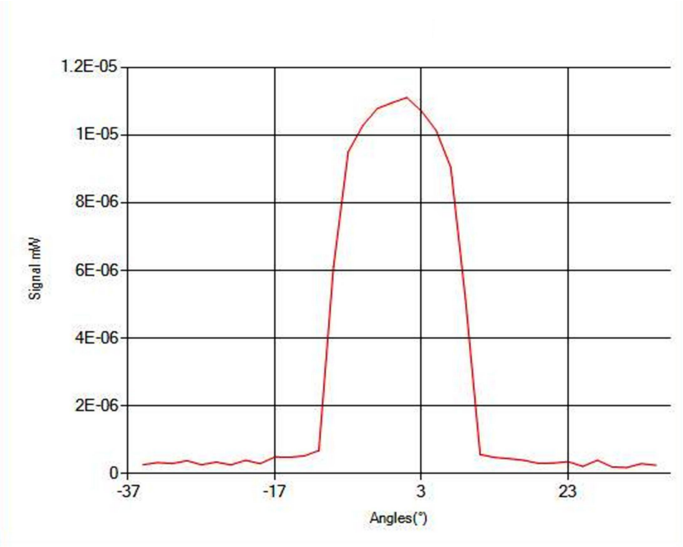
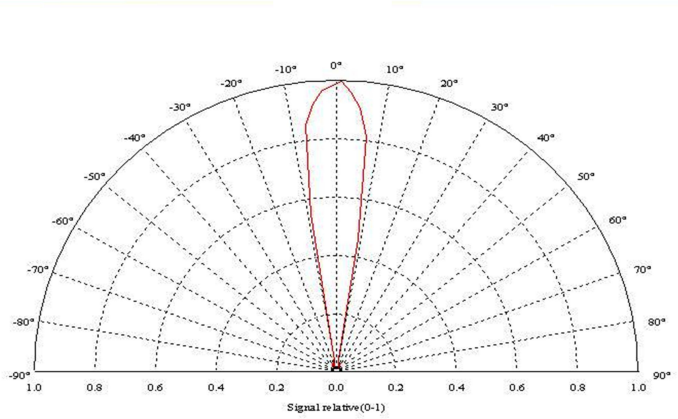




Radiation Distribution



View Angle



The information contained herein is subject to change without notice.

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