

Peak Emission Wavelength: 470nm

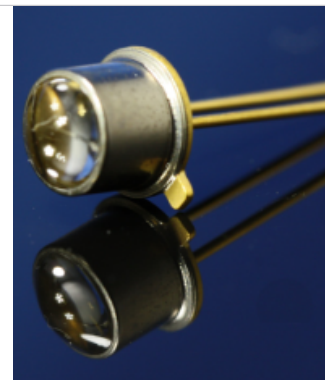
The 470nm visible emitter series is designed for applications requiring high output and precise optical / mechanical axis alignment. Custom package solutions and sorting are available.

FEATURES

- > 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)

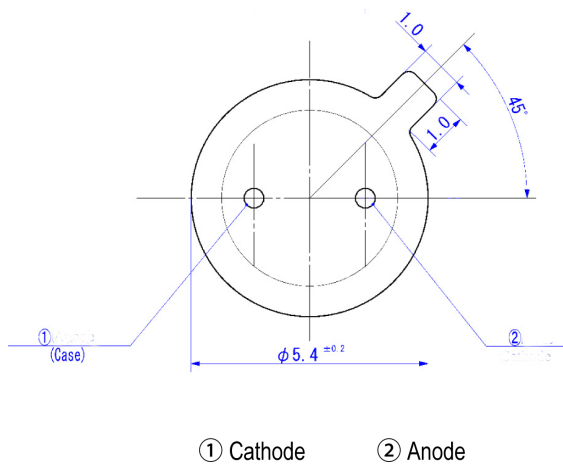
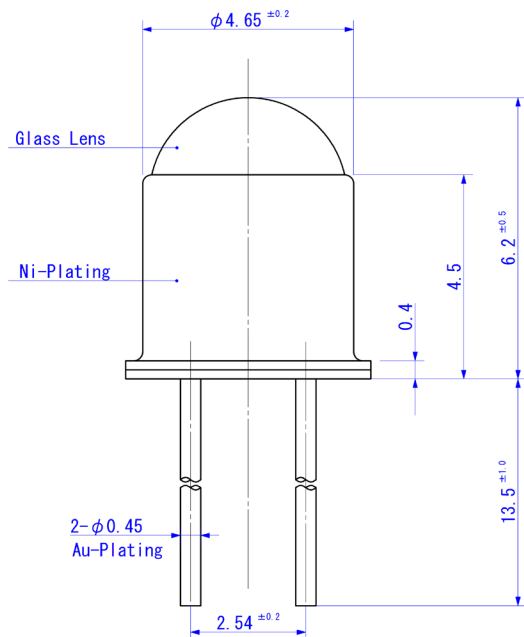


ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	30	mA
Forward Current (Pulse)*1	IFP	0.3	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	120	mW
Operating Temperature Range	Topr	-20 ~ +85	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C
Junction Temperature	Tj	100	°C
Lead Soldering Temperature*2	Tls	260	°C

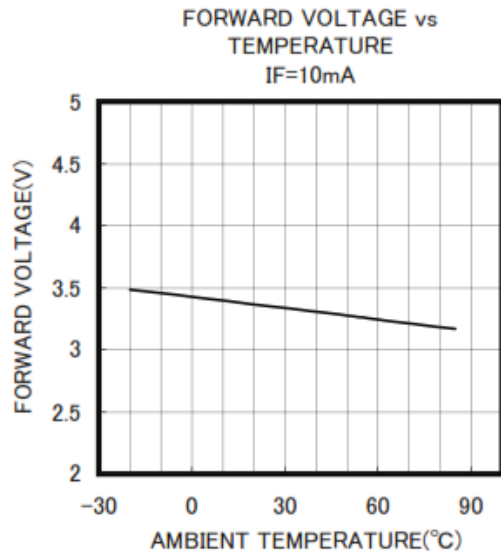
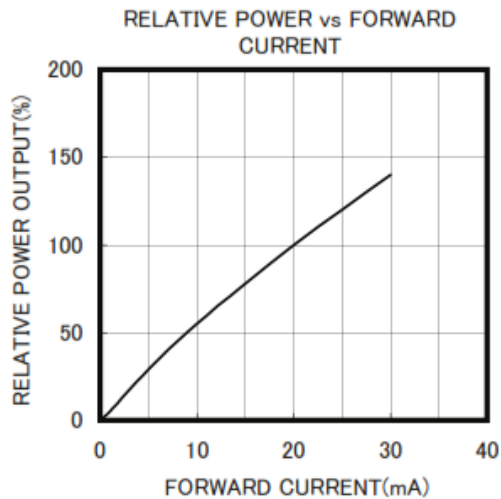
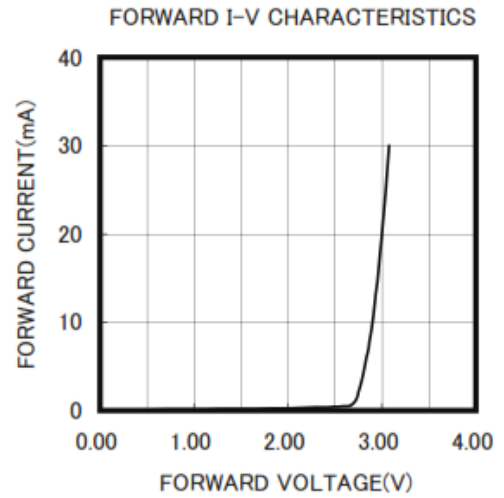
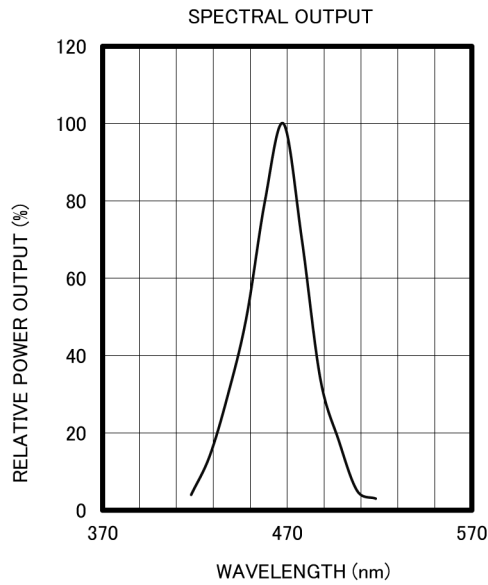
*1: Tw=10μsec, T=10msec. *2: Time 5 Sec max, Position: Up to 3mm from the body.

Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=20mA	1.8	3.0	--	mW
Forward Voltage	VF	IF=20mA	--	3.0	3.5	V
Reverse Current	IR	VR=5V	--	--	100	μA
Peak Emission Wavelength	λp	IF=20mA	--	470	--	nm
Spectral Line Half Width	Δλ	IF=20mA	--	35	--	nm
Half Intensity Beam Angle	Θ	IF=20mA	--	±6	--	deg
Temp. Coefficient of PO	P/T	IF=10mA	--	-0.2	--	%/°C
Temp. Coefficient of VF	V/T	IF=10mA	--	-3.0	--	mV/°C



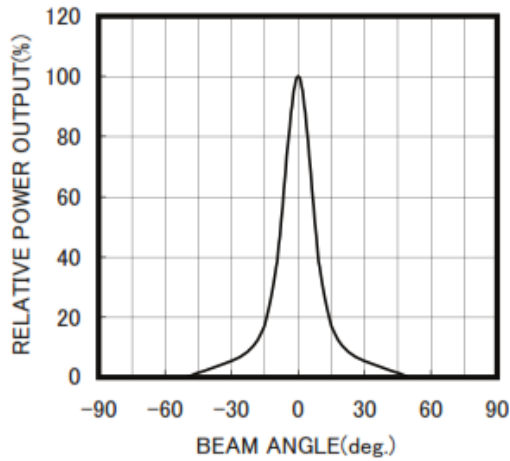
Unit: mm, Tolerance: ±0.2



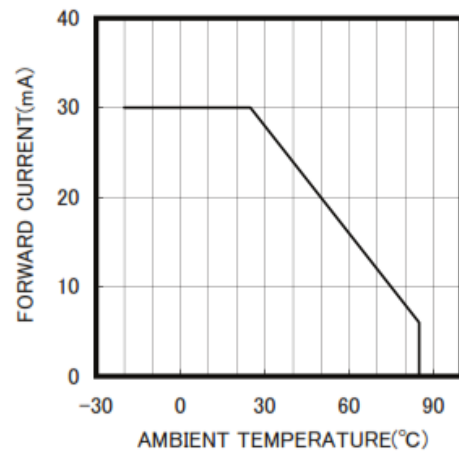
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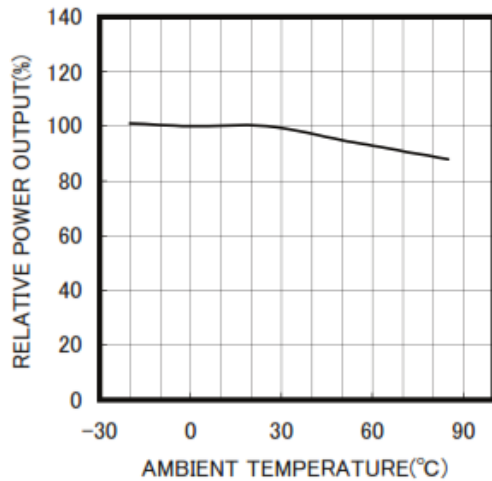
RADIATION PATTERN



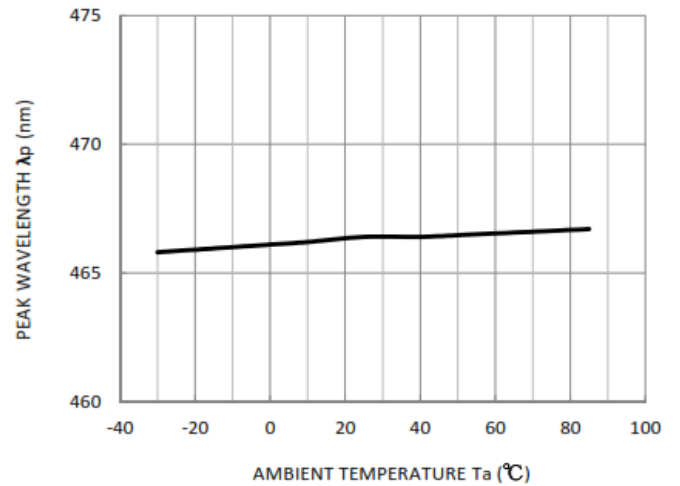
THERMAL DERATING CURVE



POWER OUTPUT vs TEMPERATURE
IF=10mA



PEAK WAVELENGTH - TEMPERATURE
[IF=20mA]



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