

470nm single color LED Diode



- **Product Description**

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

- **Product features**

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

- **Part Number**

MP-LED-470-3.5-TO46



● Application area

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

● Core parameters

Center wavelength
470nm

● General Parameters

Absolute Maximum Ratings (Ta=25°C)

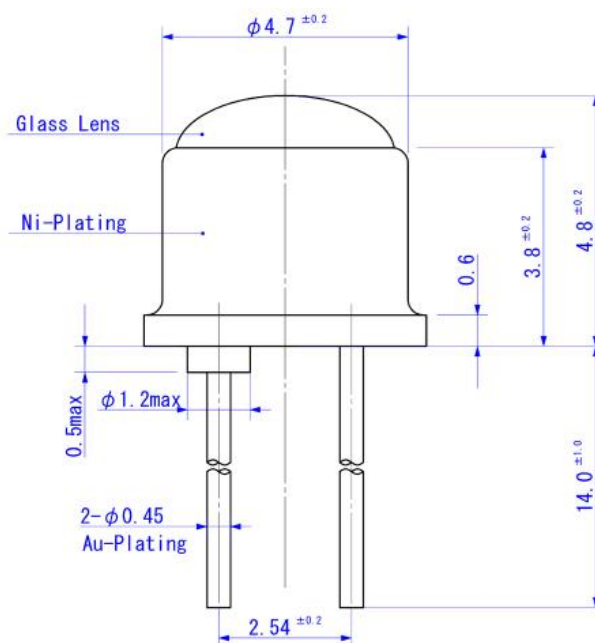
Items	Symbol	Ratings	Unit
Forward Current(DC)	IF	50	mA
Forwarded Current(Pulse)*1	IFP	0.5	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	140	mW
Operating Temperature Range	Topr	-20 ~ +85	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C
Junction Temperature	Tj	100	°C
Lead Soldering Temperature*2	Tls	260	°C

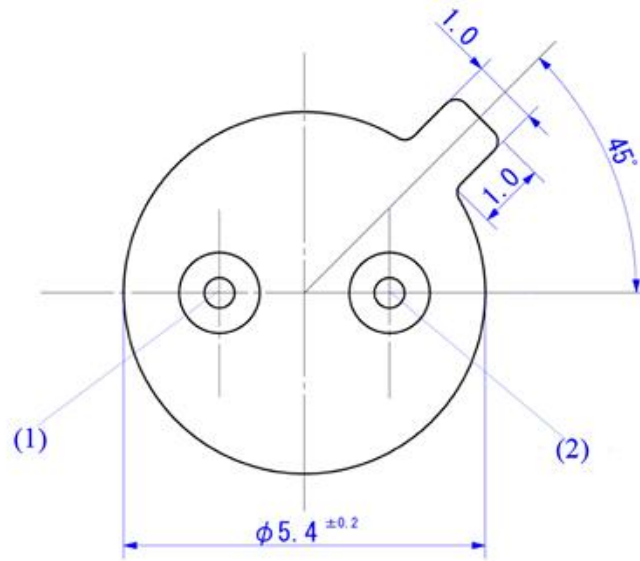
*1: Tw=10μsec, T=10msec. *2: Time 5 Sec max, Position: Up to 3mm from the body.

Electrical & Optical Characteristics (Ta = 25°C)

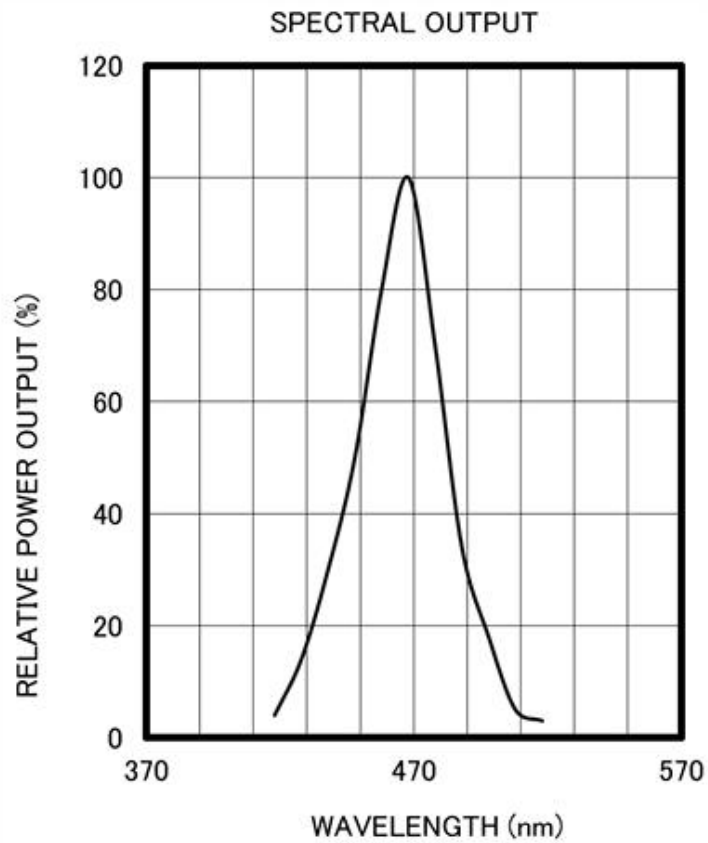
Items	Symb ol	Test Condition	Min.	Typic al	Max.	Unit
Power Output	PO	IF=20mA	--	3.5	--	mW
Forward Voltage	VF	IF=20mA	--	3.0	3.5	V
Reverse Current	IR	VR=5V	--	--	100	μA
Peak Emission Wavelength	λp	IF=20mA	--	470	--	nm
Spectra Line Half Width	Δλ	IF=20mA	--	35	--	nm
Half Intensity Beam Angle	Θ	IF=20mA	--	±5	--	°
Rise Time	TR	IF=20mA	--	40	--	ns
Fall Time	TF	IF=20mA	--	10	--	ns

Package Dimensions and Electro-Optical Characteristics

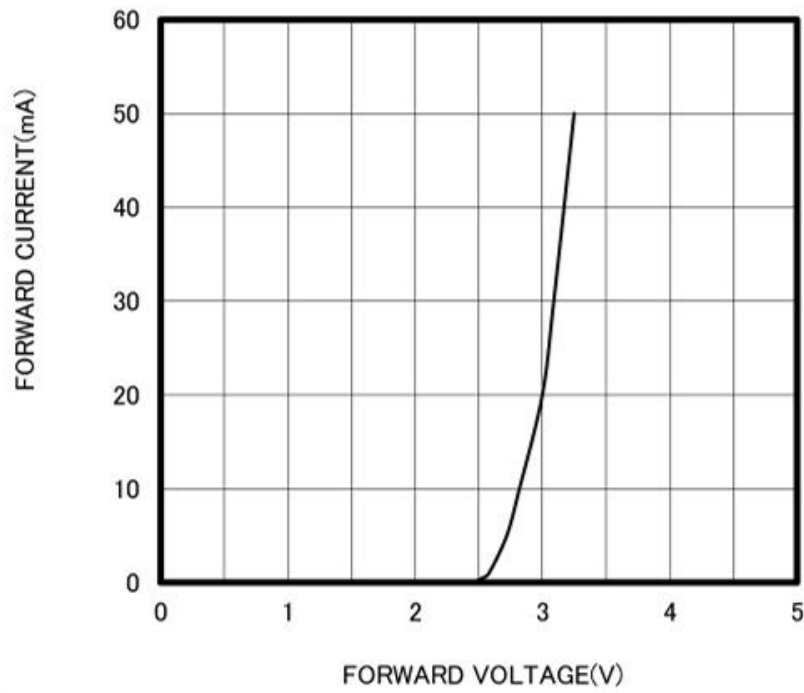




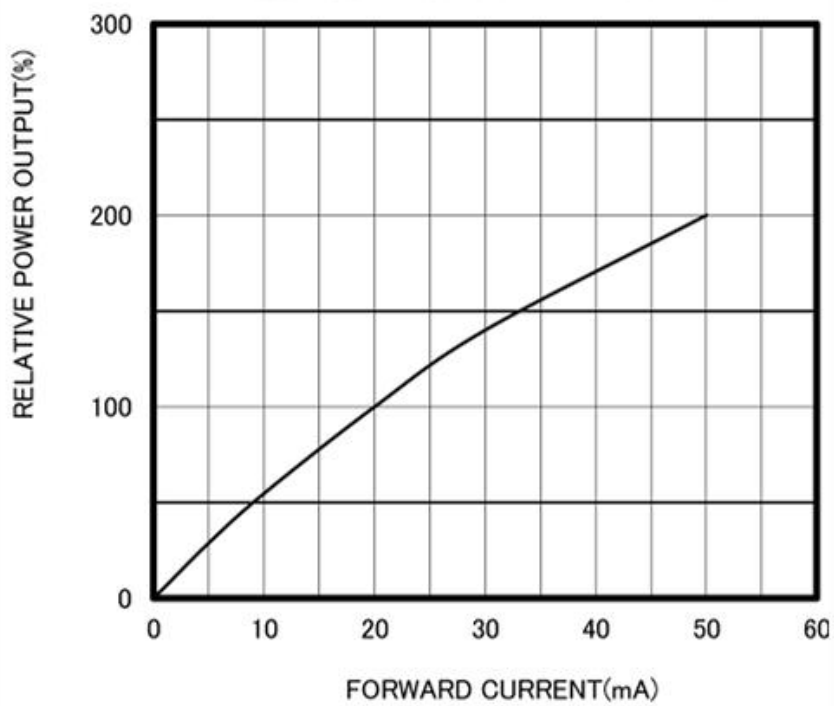
① Cathode ② Anode



FORWARD I-V CHARACTERISTICS

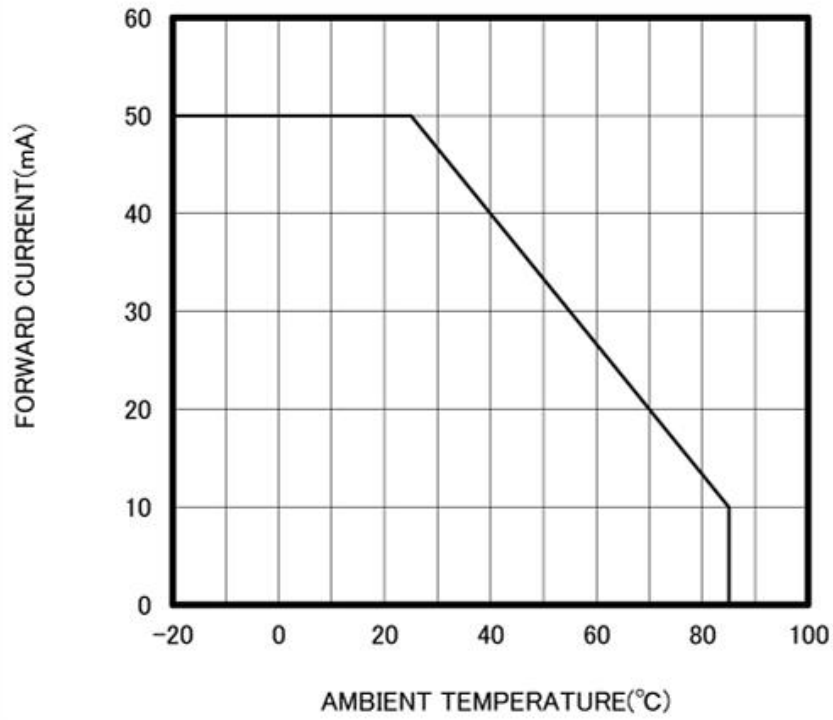


RELATIVE POWER vs FORWARD CURRENT





THERMAL DERATING CURVE



RADIATION PATTERN

