



650nm single color LED Diode



- **Product Description**

The 650nm 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**

TO-46 Metal Can Package; High Output Power; High Reliability

- **Part Number**

MP-LED-650-1.5-TO46



● Application area

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

Fiber Applications

● Core parameters

Center wavelength
650nm

● General Parameters

Absolute Maximum Ratings (Ta=25°C)

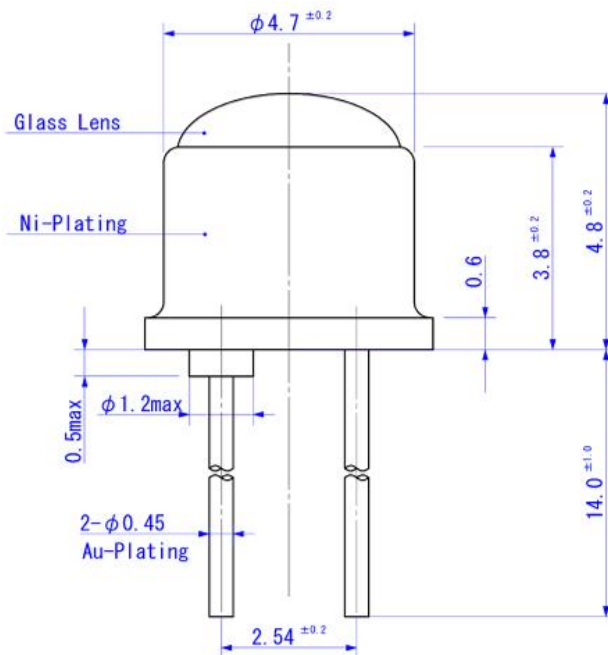
Items	Symbol	Ratings	Unit
Forward Current(DC)	IF	50	mA
Forwarded Current(Pulse)*1	IFP	0.5	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	120	mW
Operating Temperature Range	Topr	-20 ~ +85	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C
Junction Temperature	Tj	100	°C
Lead Soldering Temperature*2	Tls	260	°C

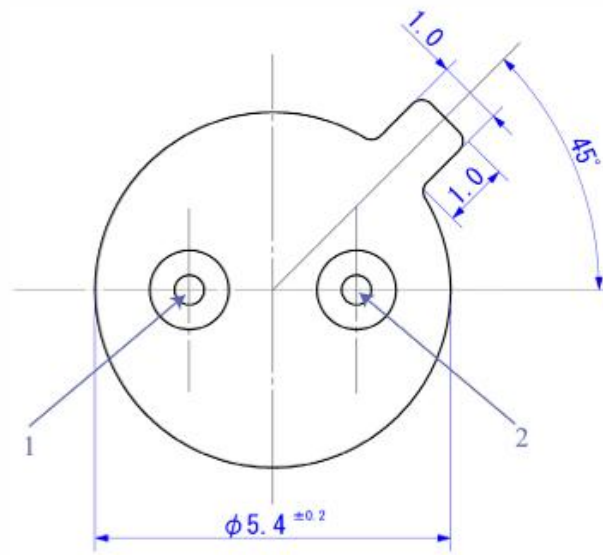
*1: Tw=10μsec, T=10msec. *2: Time 5 Sec max, Position: Up to 3mm from the body.

Electrical & Optical Characteristics (Ta = 25°C)

Items	Symbol	Test Condition	Min.	Typical	Max.	Unit
Power Output	PO	IF=20mA	0.8	1.5	--	mW
Forward Voltage	VF	IF=20mA	--	2.0	2.4	V
Reverse Current	IR	VR=5V	--	--	100	μA
Peak Emission Wavelength	λ_p	IF=20mA	--	650	--	nm
Spectra Line Half Width	$\Delta\lambda$	IF=20mA	--	20	--	nm
Half Intensity Beam Angle	Θ	IF=20mA	--	± 4	--	°

Package Dimensions and Electro-Optical Characteristics





① Cathode ② Anode