

525nm single color LED Diode



- **Product Description**

The 525nm 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-18 Metal Can Package; High Output Power; High Reliability

- **Part Number**

MP-LED-525-0.9-TO18



● Application area

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

Fiber Applications

● Core parameters

Center wavelength
525nm

● General Parameters

Absolute Maximum Ratings (Ta=25°C)

Items	Symbol	Ratings	Unit
Forward Current(DC)	IF	30	mA
Forwarded 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

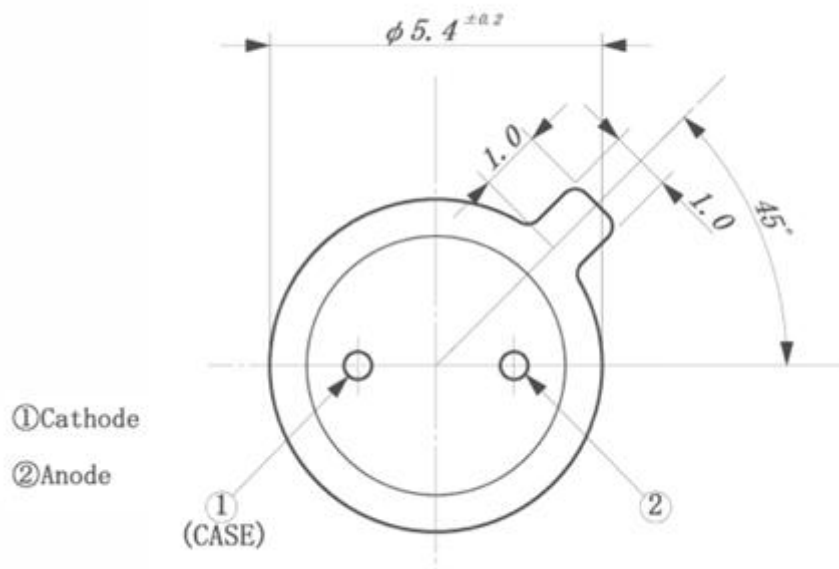
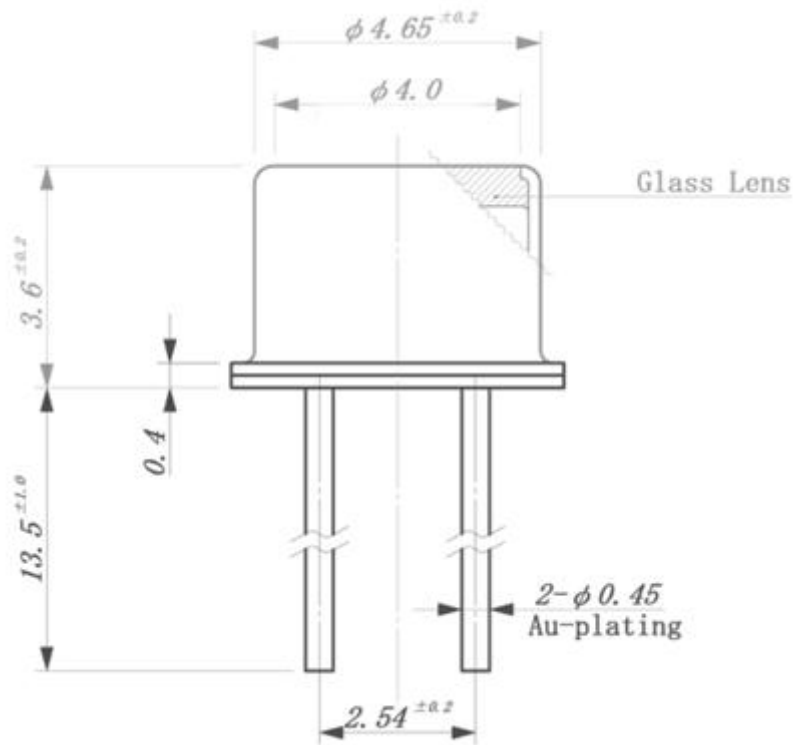
*1: Tw=10μsec, T=10msec. *2: Time 5 Sec max, Position: Up to 3mm from the body.



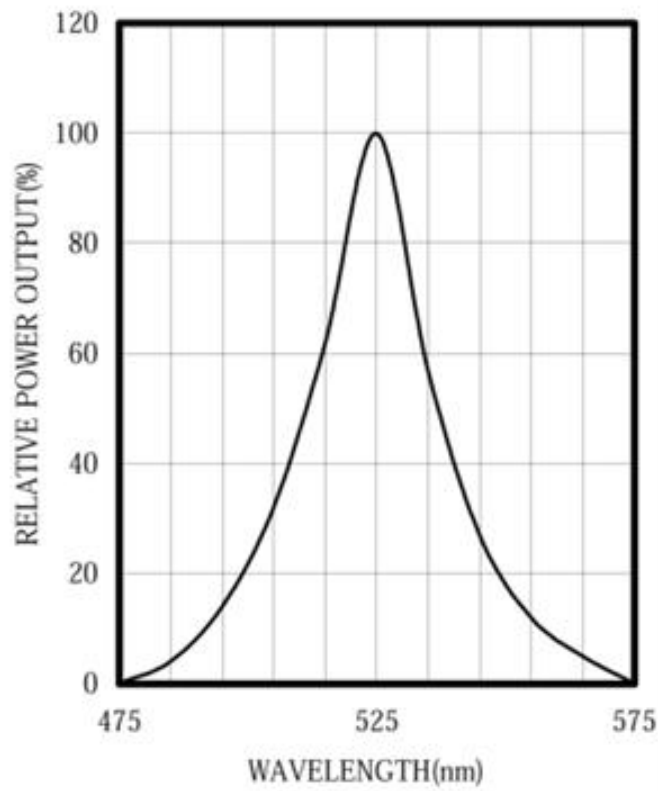
Electrical & Optical Characteristics (Ta = 25°C)

Items	Symbol	Test Condition	Min.	Typical	Max.	Unit
Power Output	PO	IF=20mA	0.5	0.9	--	mW
Forward Voltage	VF	IF=20mA	--	3.5	4.0	V
Reverse Current	IR	VR=5V	--	--	100	μA
Peak Emission Wavelength	λp	IF=20mA	--	525	--	nm
Spectra Line Half Width	Δλ	IF=20mA	--	45	--	nm
Half Intensity Beam Angle	θ	IF=20mA	--	±20	--	°
Rise Time	TR	IF=20mA	--	--	--	Ns
Fall Time	TR	IF=20mA	--	--	--	Ns
Junction Capacitance	Cj	1MHz, V=0V	--	25	--	pF
Temperature Coefficient of PO	P/T	IF=10mA	--	-0.5	--	%/°C
Temperature Coefficient of VF	V/T	IF=10mA	--	-4.0	--	mV/°C

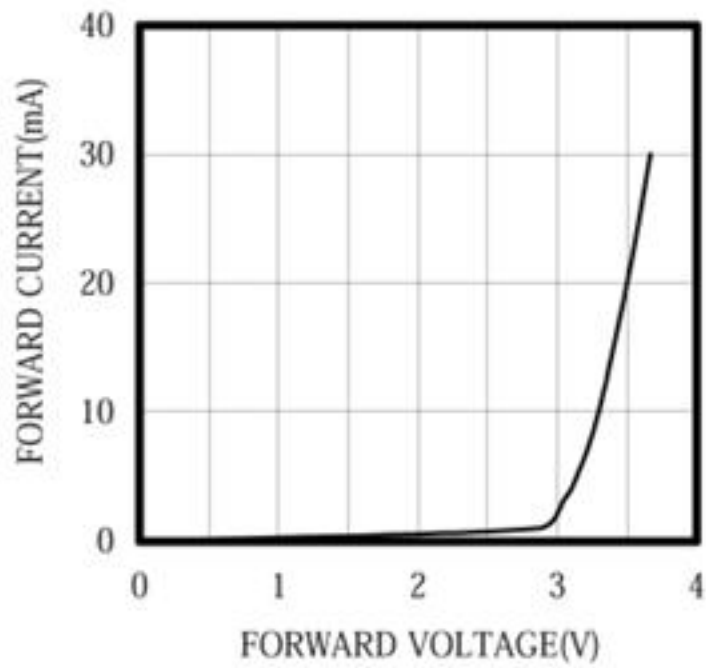
Package Dimensions and Electro-Optical Characteristics



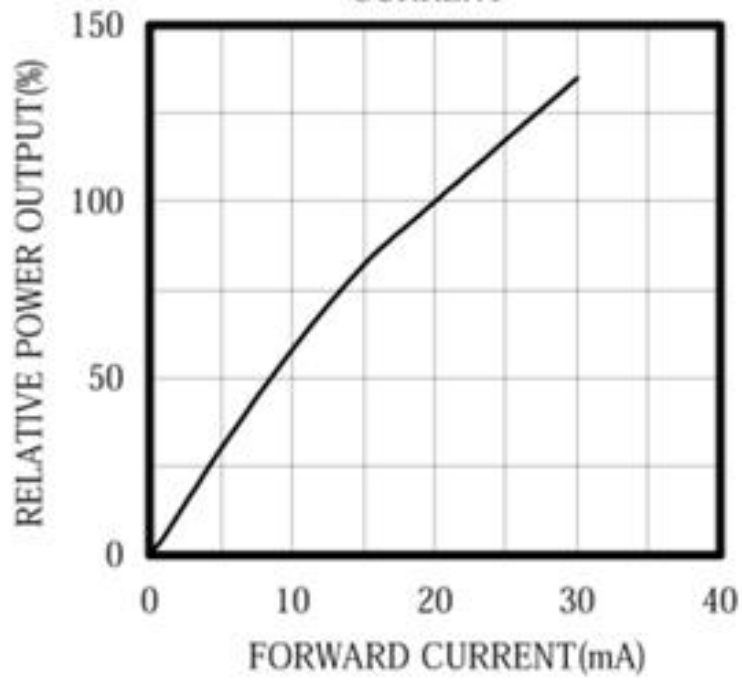
SPECTRAL OUTPUT



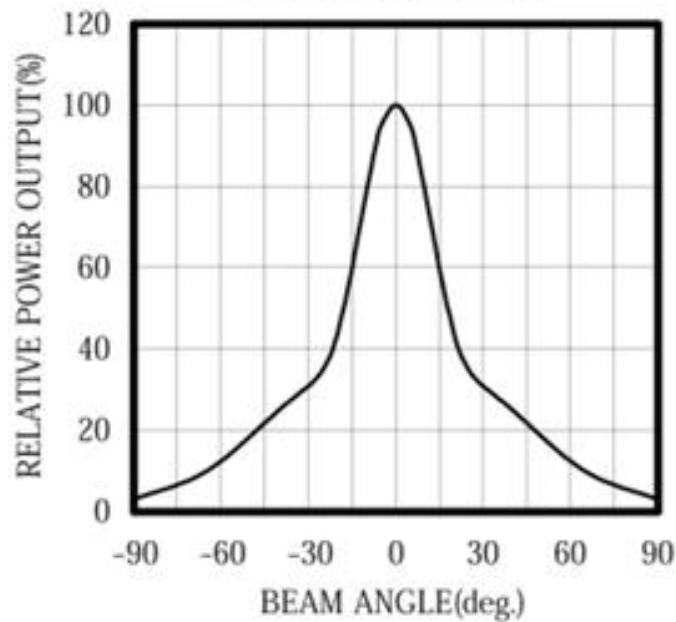
FORWARD I-V CHARACTERISTICS



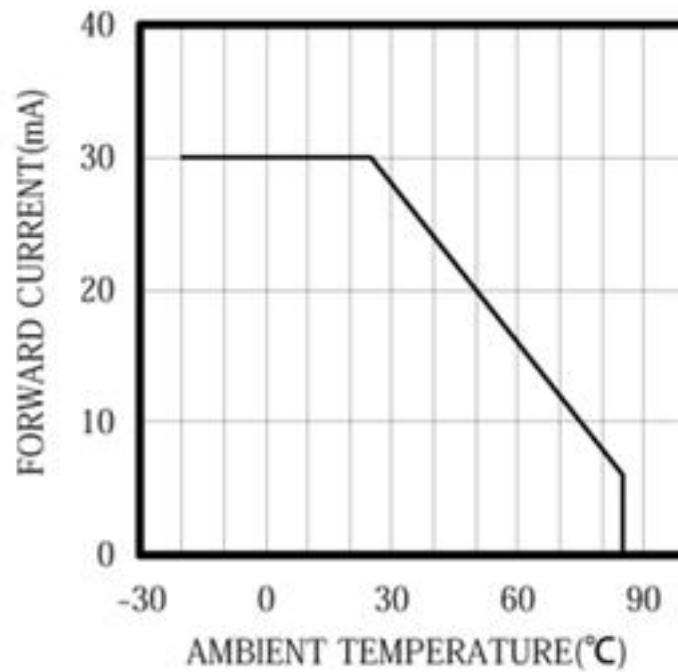
RELATIVE POWER vs FORWARD CURRENT



RADIATION PATTERN



THERMAL DERATING CURVE



LUMINOUS INTENSITY vs TEMPERATURE IF=10mA

