

660nm Parallel Light Emitting Diode

1. GENERAL DESCRIPTION

T46-660-H6 is serials of LEDs designed for optical encoder,with precision optical design.

2. FEATURES

- TO-46K can type with glass lens.
- Peak wavelength 660nm.
- Parallel light emitting.
- High reliability.

3. APPLICATION

- Optical encoder.
- Optical switches
- Grating scale.
- Factory application.

4. ABSOLUTE MAXIMUM RATINGS AT Ta=25°C

ITEM	SYMBOL	MAXIMUM RATING	UNIT
Power Dissipation	P _D	150	mW
forward current	I _F	60	mA
Reverse voltage	V _R	5	V
Operating temperature range	T _{opr.}	-30 to +100	°C
Storage temperature range	T _{stg.}	-40 to +125	°C
soldering temperature (see Note 1)	T _{sol.}	260	°C

Note1:For MAX. 5 seconds at the position of 2mm from the resin edge.

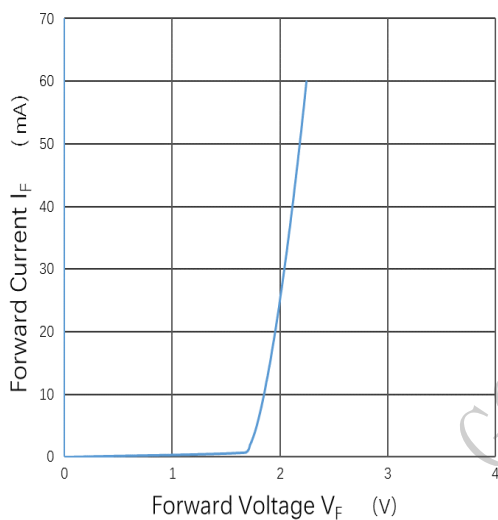
5. ELECTRIO-OPTICAL CHARACTERISTICS AT Ta=25°C

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Forward Voltage	V _F	1.85	2.0	2.4	V	L _F =20mA
Reverse Current	I _R			10	μ A	V _R =5V
Radiant Intensity	P _o		5.2		mW	L _F =20mA
Peak Wavelength	λ _p		660		nm	L _F =20mA
Spectral Width	Δλ		± 10		nm	L _F =20mA
Beam Diameter	φ _B		4		mm	L=3mm

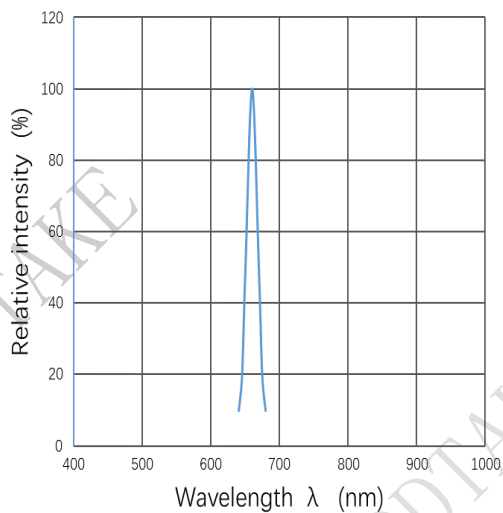
6. TYPICAL ELECTRICAL/OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

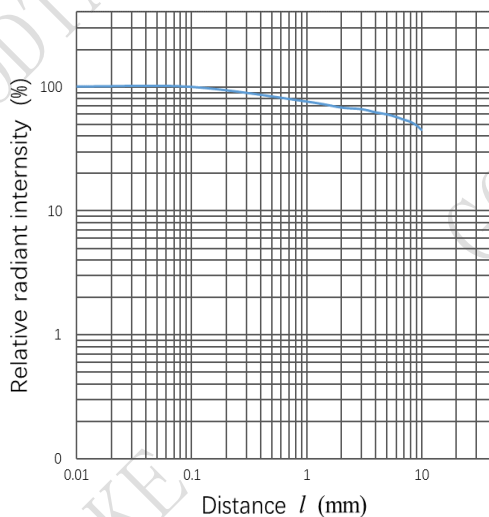
Forward I-V Curve



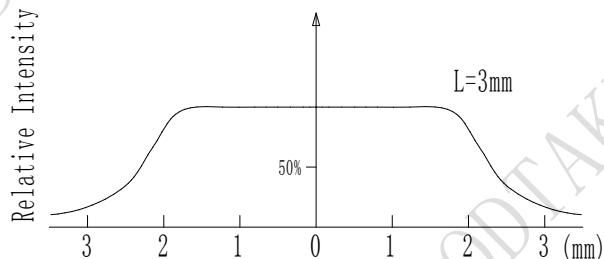
Spectrum



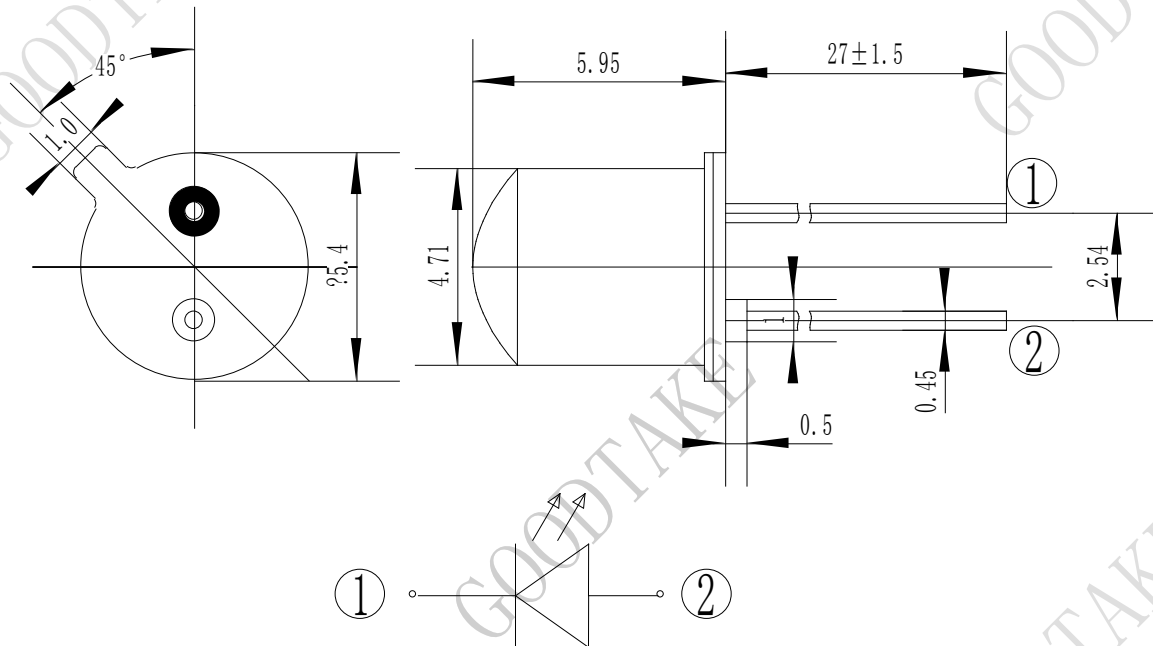
Radiant intensity by distance



Radiation Pattern



7. DIMENSIONS IN MM



Notes

1. All dimensions are in millimeters.
2. Tolerance is ±0.2 unless otherwise noted.

8.Storage

Do not open the sealed moisture-proof bag before ready to use.
 Storage in controlled environment of temperature =40°C or below, with maximum humidity <90%.

9. Manual Soldering

Use only temperature-controlled soldering station with 25 watt iron or less, maximum tip temperature always below 350°C. By putting the solder tip so it touches both the PCB board pad (applied with solder) and the device's terminal pin, finish soldering within 3 seconds each time, leave two seconds and more intervals before doing another soldering. Be careful the iron tip should not touch the device package body to avoid damage.