

MED7P14-SMF-1 is SMD equipped with a red point source LED with a small size emitting window. This SMD is ideally suited for use in applications where high output power and reliability are required such as optical sensors and switches.

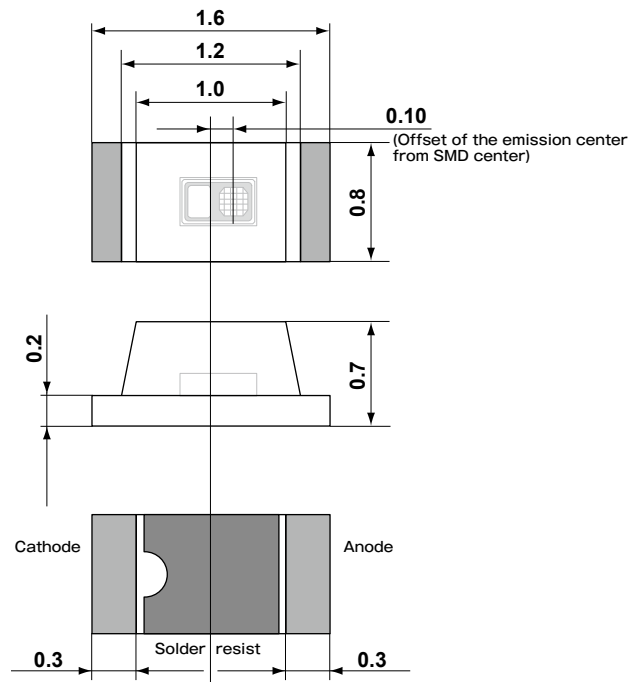
## Features

- Small-size emitting window
- High output power
- High reliability

## Applications

- Optical sensors
- Optical switches etc.

## Dimensional outline drawing (mm)



## Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Forward Current	$I_F$	50	mA
Reverse Voltage	$V_R$	3	V
Operating Temperature	$T_{opr}$	-40~85	°C
Storage Temperature	$T_{stg}$	-40~100	°C

## Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F=20\text{mA}$	-	2.1	2.8	V
Reverse Current	$I_R$	$V_R=3\text{V}$	-	-	10	$\mu\text{A}$
Output Power	$P_o$	$I_F=20\text{mA}$	4.0	5.7	-	mW
Peak Wavelength	$\lambda_p$	$I_F=20\text{mA}$	630	650	670	nm

# MED7P14-SMF-1

Fig.1  $I_F / T_a$

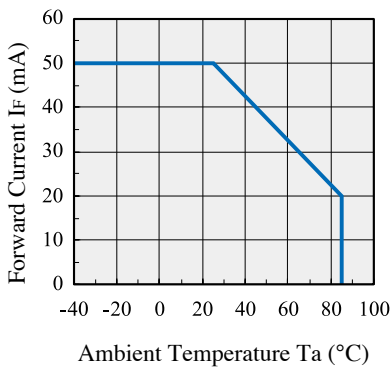


Fig.2  $I_F / V_F$

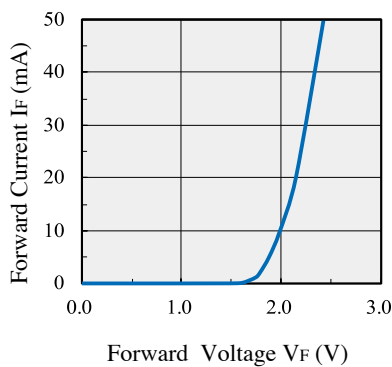


Fig.3  $V_F / T_a$

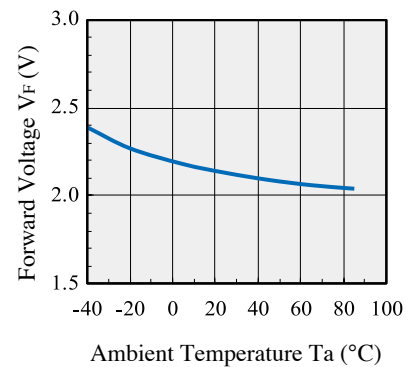


Fig.4  $P_o / I_F$

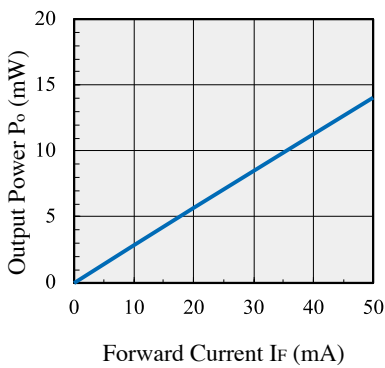


Fig.5 Spatial Distribution

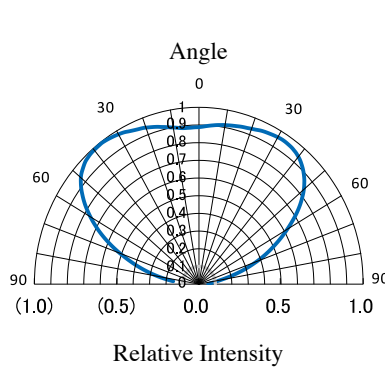


Fig.6 Spectral Characteristic

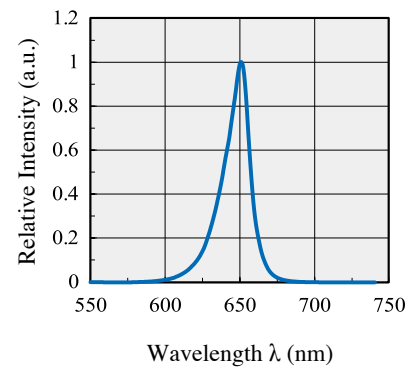


Fig.7 Peak Wavelength  $\lambda_p / T_a$

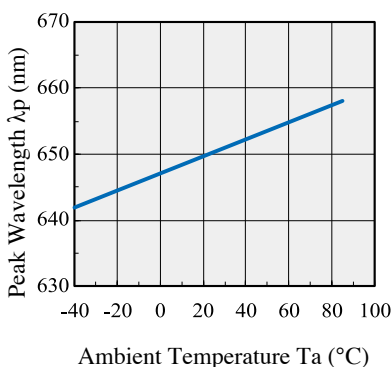


Fig.8 Spectral Width  $\Delta\lambda / T_a$

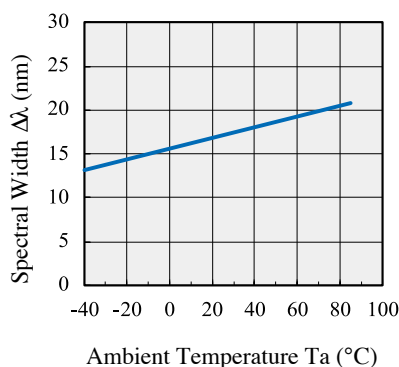
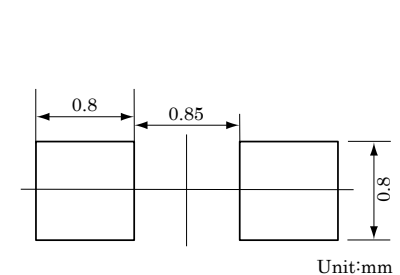


Fig.9 Recommended Land Pattern



This catalogue was compiled in March 2023. All items listed in the catalogue are subject to change without any prior notice.

Products listed in this catalogue are designed and manufactured for use in standard applications (eg: household appliances, OA/AV, telecommunications, measurement instruments). The customers should take security measures, when used the products in critical reliability and security applications (eg: space and aviation, critical-safety transport applications, nuclear power control, medical, life-supporting units and equipment). We assume no liability for damages incurred by use of the products without taking measures described above.

