Optrans

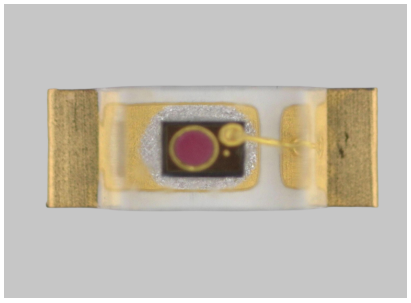
Preliminary

Point Source Emitter

Product No: **VS678SMTR2**

Peak Emission Wavelength: 650nm

The 650nm emitter is designed for applications requiring high output and precise optical / mechanical axis alignment. Custom package solutions and sorting are available.



FEATURES

> 1.4 x 0.6 x 0.68 Transfer-molded SMT Package
> Emitting Window Diameter Φ 170μm
> High Output Power / High Reliability
> Wide Beam Angle

APPLICATIONS

> Light Source For Emitters
> Industrial Equipment
> Machine Vision
> Optical Encoders

Absolute Maximum Ratings (Ta=25°C)

ITEMS	SYMBOL	RATINGS	UNIT
Forward Current	IF	80	mA
Reverse Voltage	VR	3	V
Operating Temperature Range	Topr	-40 ~ +85	°C
Storage Temperature Range	Tstg	-40 ~ +100	°C

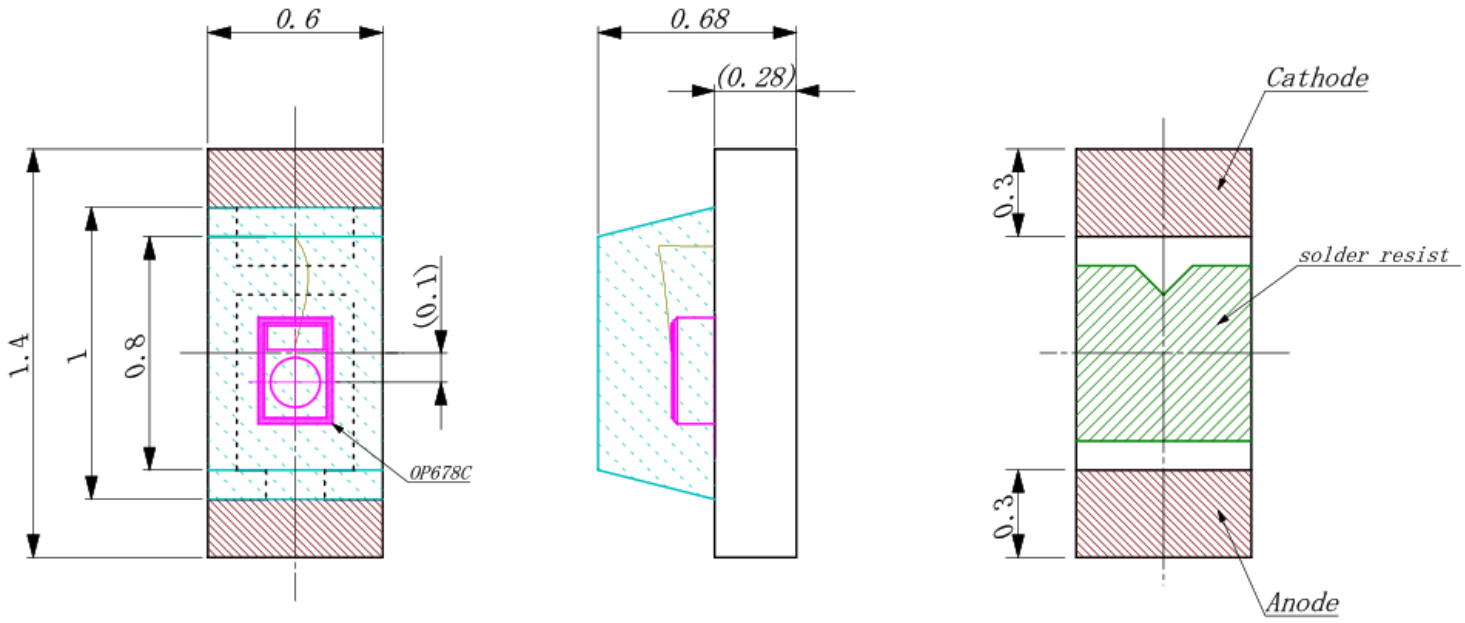
*1: Tw=10μsec, T=10msec.

Electrical & Optical Characteristics (Ta = 25°C)

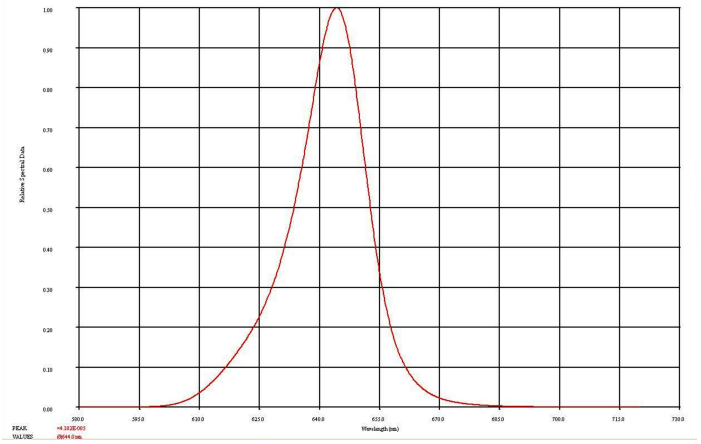
ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=20mA	--	7.4	--	mW
Forward Voltage	VF	IF=20mA	--	1.96	--	V
Reverse Current	IR	VR=5V	--	--	100	μA
Peak Emission Wavelength	λp	IF=20mA	--	650	--	nm
Spectral Line Half Width	Δλ	IF=20mA	--	19	--	nm
Half Intensity Beam Angle	½Θ	IF=20mA	--	±73	--	deg

2026-08-21

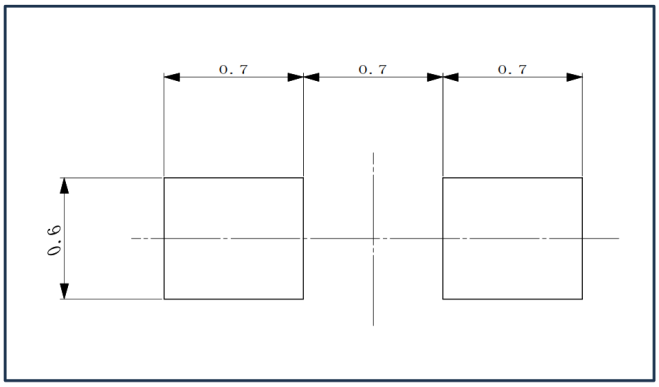
Package Drawing



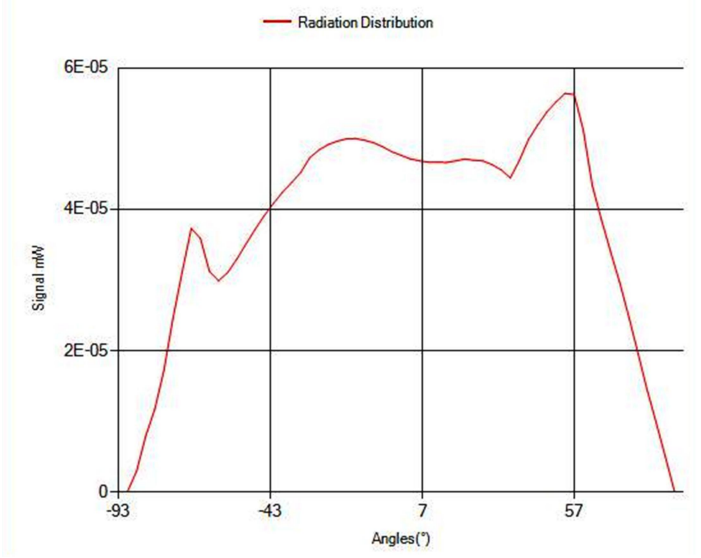
SPECTRAL RESPONSE



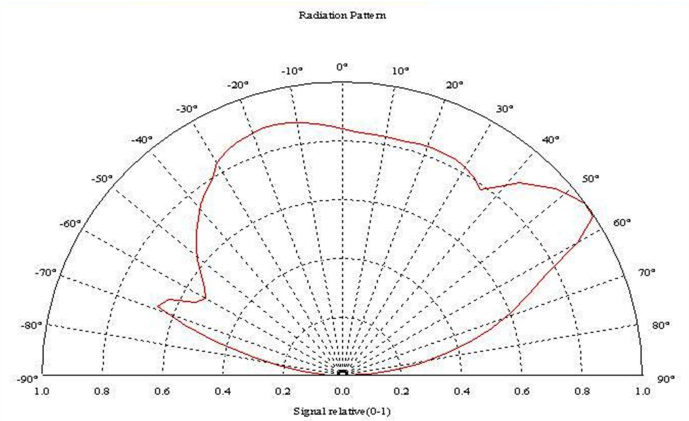
Recommended Soldering Pattern [mm]



RADIATION DISTRIBUTION



VIEW ANGLE



2026-08-21