

Peak Emission Wavelength: 770nm (3)

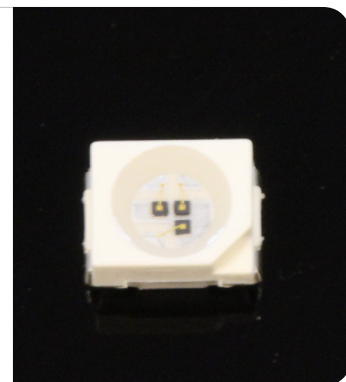
The MTMS7700SMT4 is a multi-chip emitter designed for applications requiring same emission sources in a small, densely packaged area. These devices can be custom designed for specific wavelengths and outputs.

FEATURES

- > PLCC-4 Package
- > High Reliability
- > High Output Power

APPLICATIONS

- > Medical Instrumentation
- > Currency Validation
- > Biofluorescence Analysis



Absolute Maximum Ratings (Ta=25°C)

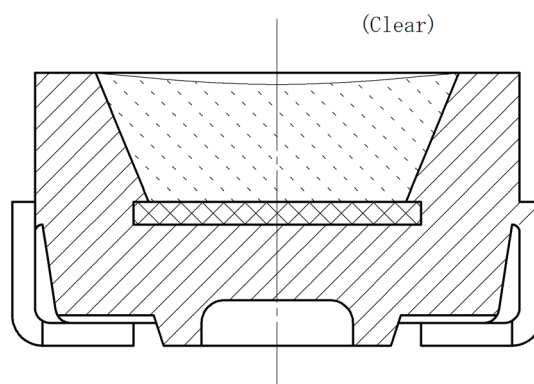
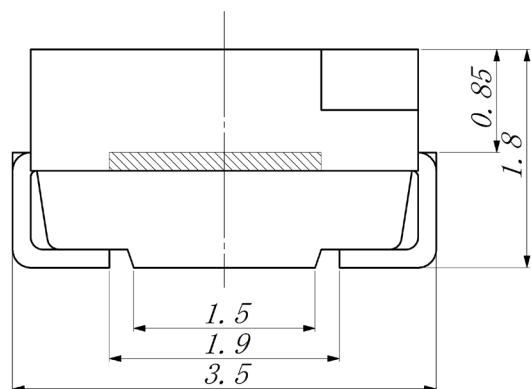
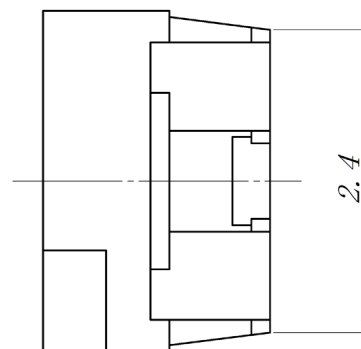
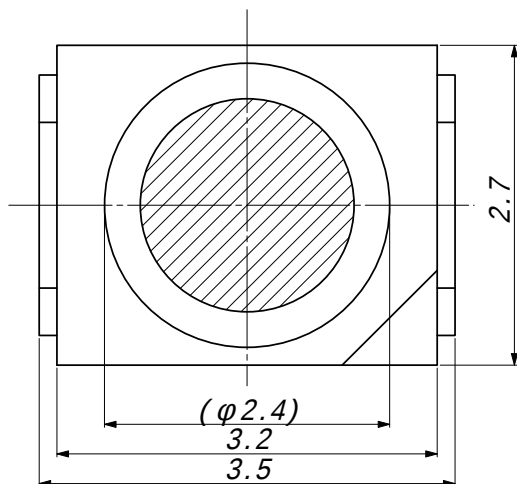


ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	50	mA
Forward Current (Pulse)*1	IFP	0.5	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	160	mW
Operating Temperature Range	Topr	-20 ~ +80	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C

*1: Tw=10μsec, T=10msec.

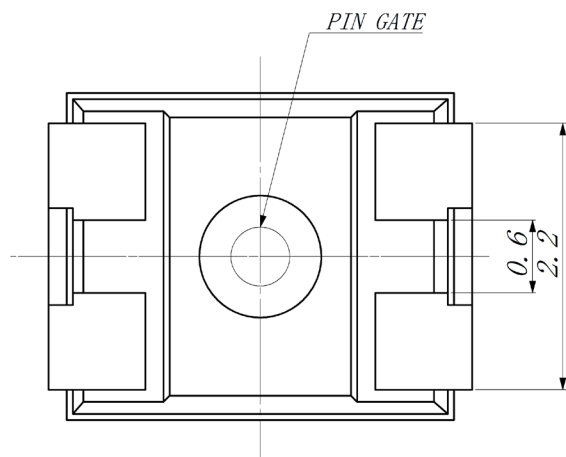
Electrical & Optical Characteristics (Ta = 25°C)(Per Chip)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=20mA	--	6.7	--	mW
Forward Voltage	VF	IF=20mA	--	1.6	1.9	V
Reverse Current	IR	VR=5V	--	--	100	μA
Peak Emission Wavelength	λp	IF=20mA	--	770	--	nm
Spectral Line Half Width	Δλ	IF=20mA	--	35	--	nm

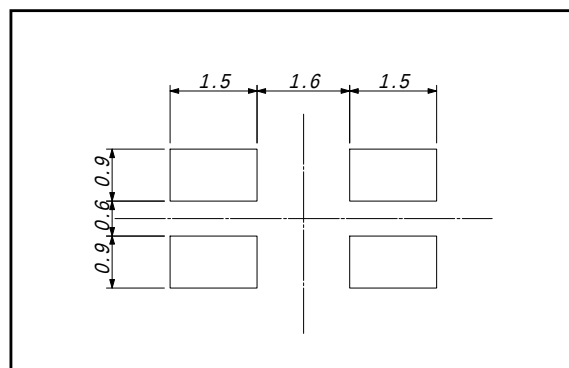
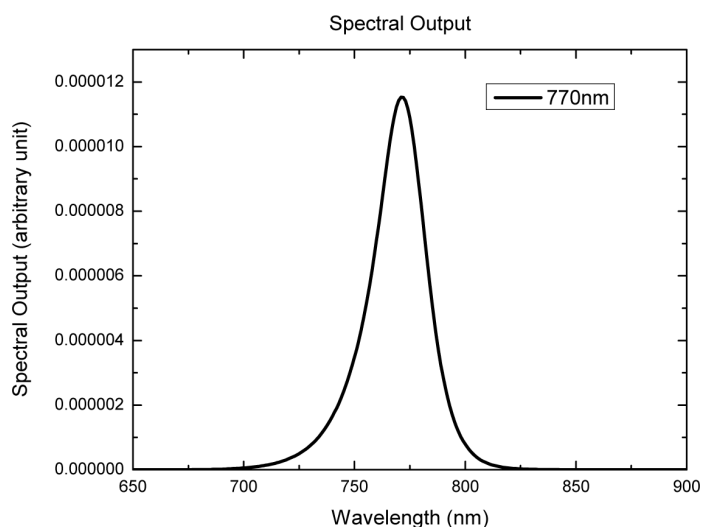
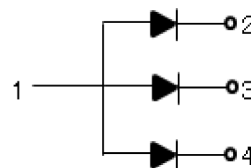


Unit: mm, Tolerance: ± 0.2

2014-10-16



- 1 — Anode Common
- 2 — 770nm Cathode
- 3 — 770nm Cathode
- 4 — 770nm Cathode



Recommended Soldering Pattern [mm]

Unit: mm, Tolerance: ± 0.2

2014-10-16

Soldering Conditions:

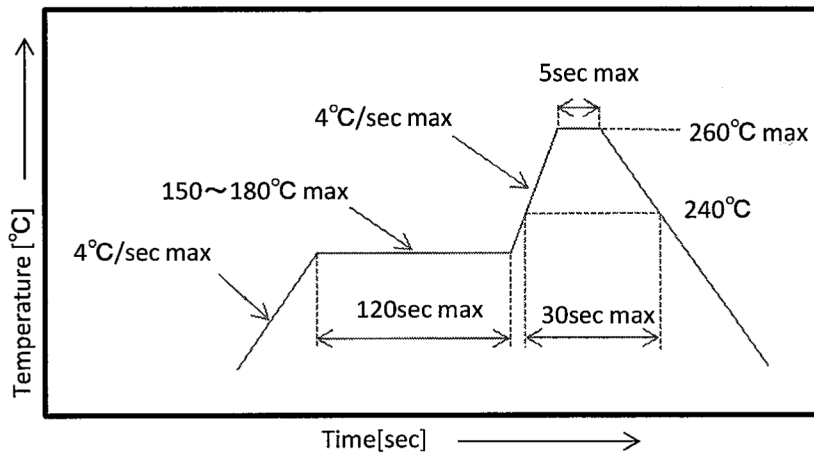
(1) Reflow Soldering

- Please implement the following temperature profile.
- Please do not handle the product until it has returned to ambient temperature.

(2) Hand Soldering

- Soldering tip temperature must be under 320°C.
- Soldering must be done within 3 seconds each.
- When soldering, do not add pressure to the resin portion.
- Please do not handle the product until it has returned to ambient temperature.

Reflow Soldering Temperature-Profile [Pb free Soldering] (Recommend condition)



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