

Peak Emission Wavelength: 1040nm

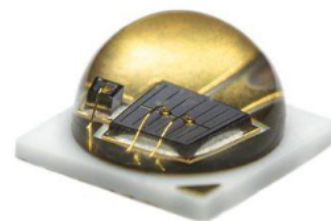
The MTSM4010-460-IR consists of a 1040nm high output infrared die in a 3.5mm x 3.5mm silicone surface mount package. Custom package solutions and sorting are available.

FEATURES

- > High Output Power
- > Wide Beam Angle
- > High Reliability

APPLICATIONS

- > Optical Switches & Sensors
- > Fiber Optical Communication
- > Bar-code Reader



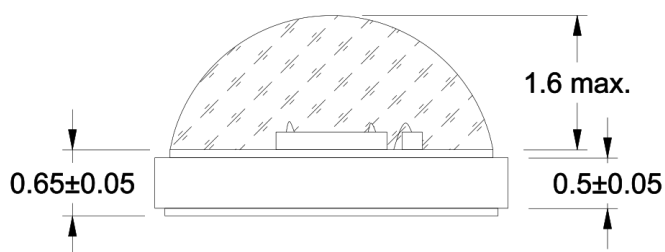
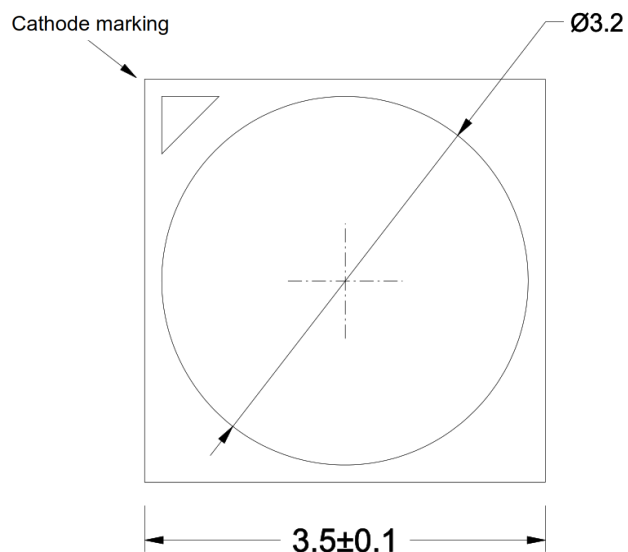
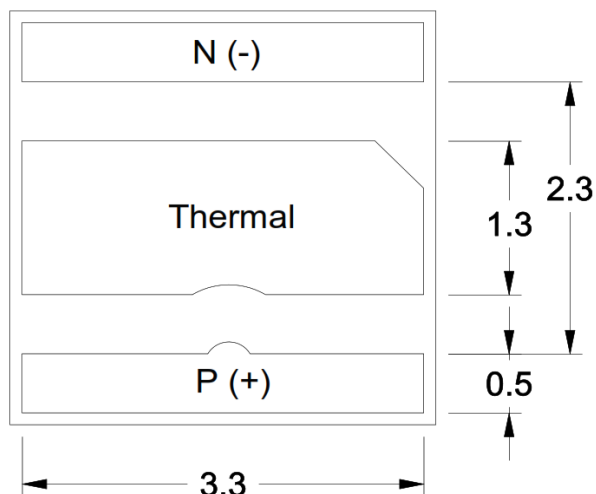
Absolute Maximum Ratings (Ta=25°C)



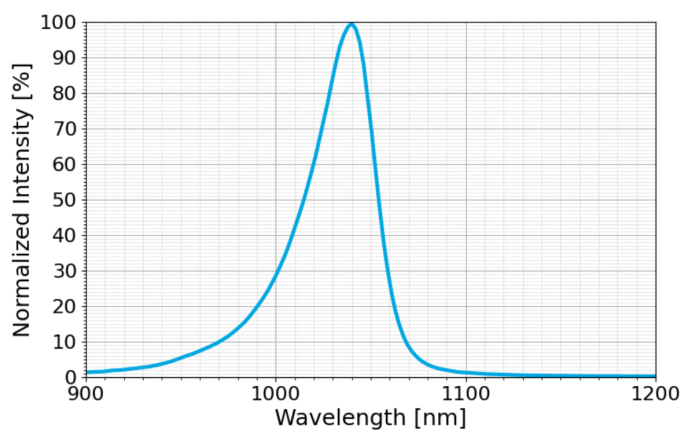
ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	1500	mA
Reverse Voltage	VR	5	V
Operating Temperature Range	Topr	-40 ~ +85	°C
Storage Temperature Range	Tstg	-40 ~ +85	°C

Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=350mA	--	215	--	mW
Power Output	PO	IF=1000mA	--	550	--	mW
Forward Voltage	VF	IF=350mA	--	1.4	1.8	V
Forward Voltage	VF	IF=1000mA	--	1.7	--	V
Reverse Current	IR	VR=5V	--	--	10	μA
Peak Emission Wavelength	λp	IF=350mA	1020	1040	1060	nm
Spectral Line Half Width	Δλ	IF=350mA	--	40	--	nm
View Angle	Θ	IF=350mA	--	135	--	deg

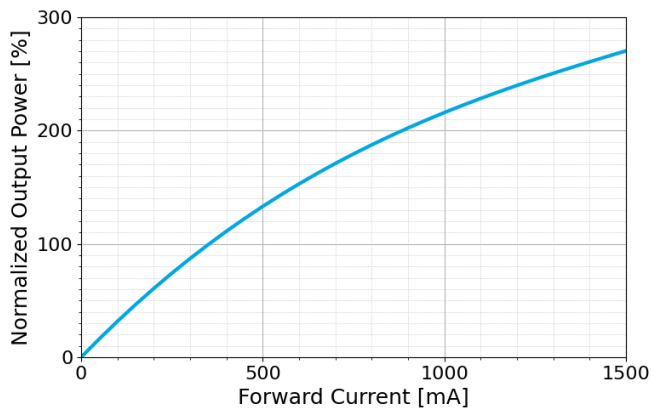


SPECTRAL OUTPUT

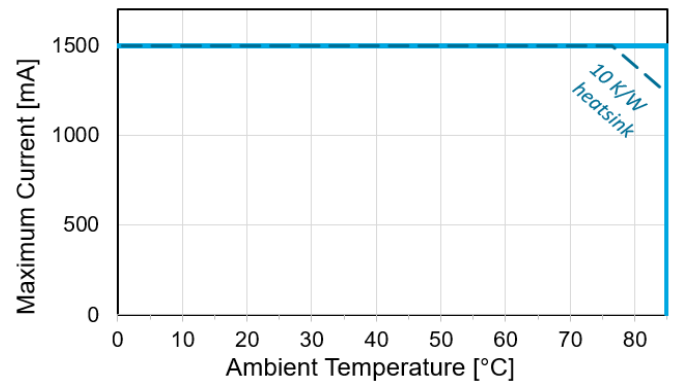


Unit: mm, Tolerance: ± 0.2

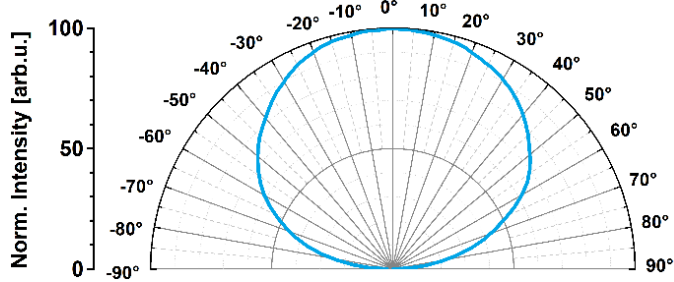
Relative Intensity vs Forward Current



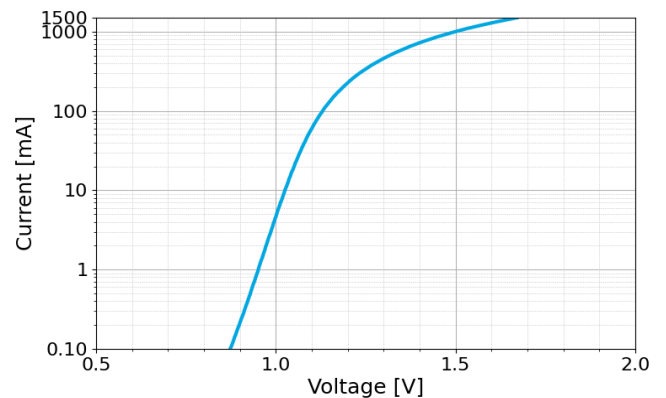
Maximum Rating (Heatsink)



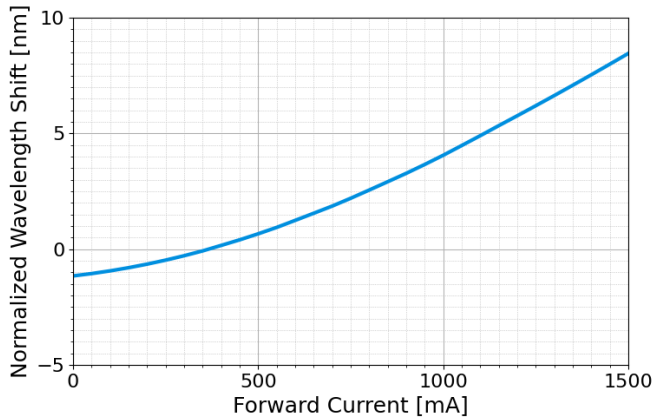
RADIATION PATTERN



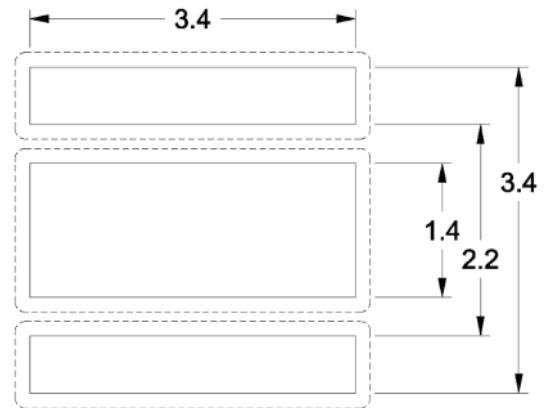
Forward Current vs Forward Voltage



Wavelength Shift vs Forward Current

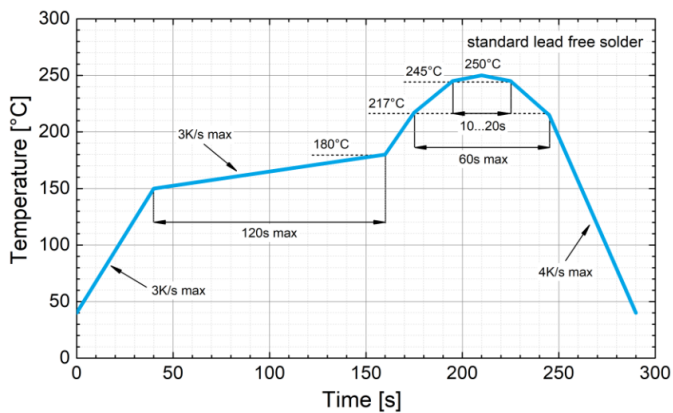


Recommended Solder Pattern

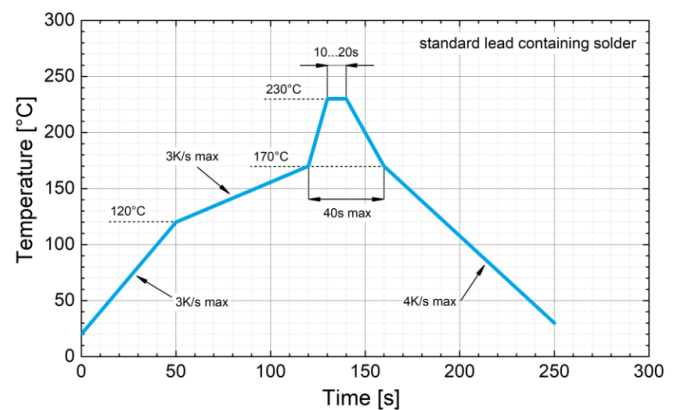


Unless otherwise specified, all drawing units are in mm

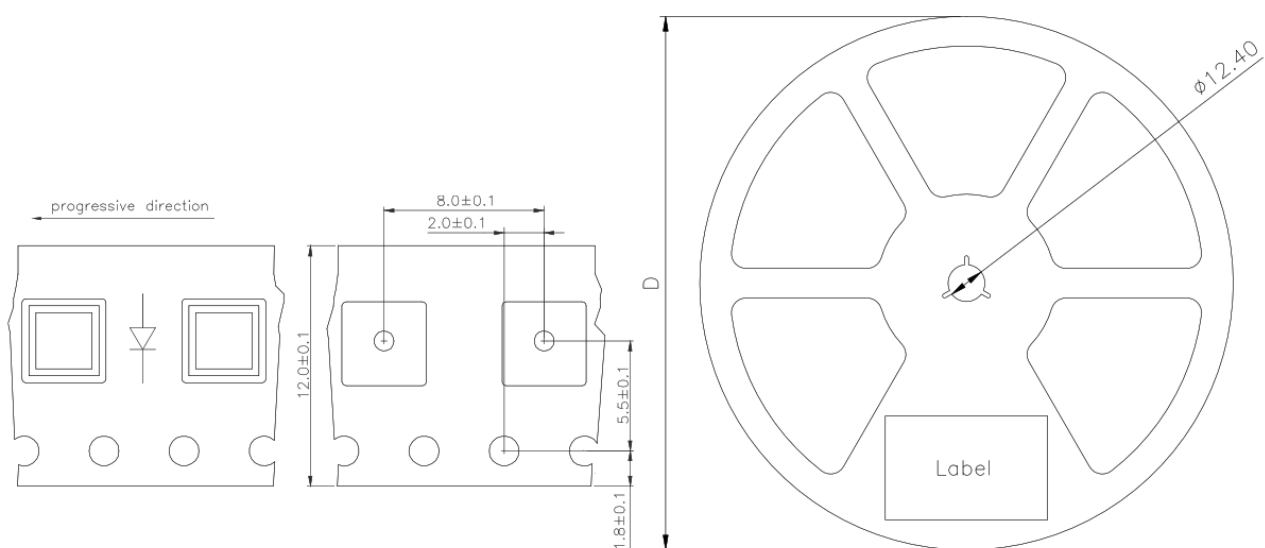
IR Reflow Profile (Lead Free)



IR Reflow Profile (Containing Lead)



Tape and Reel Packaging



D	Parts/reel
7"	1000

The information contained herein is subject to change without notice.

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