Marktech Optoelectronics

Multichip Emitter

Product No: **MTMD7885T38**

Peak Emission Wavelength: 770nm (2), 810nm (2), 850nm (2)

The MTMD7885T38 is a multi-chip emitter designed for applications requiring various emission sources in a small, densely packaged area. These devices can be custom designed for specific wavelengths and outputs.



FEATURES

> Hermetically Sealed Metal Can Pacakge
> High Reliability
> High Output Power

APPLICATIONS

> Medical Instrumentation
> Currency Validation
> Biofluorescence Analysis

Absolute Maximum Ratings (Ta=25°C)

ITEMS	SYMBOL	RATINGS			UNIT
		770	810	850	
Forward Current (DC)	IF	50	100	100	mA
Forward Current (Pulse)*1	IFP	0.5	1	1	A
Reverse Voltage	VR		5		V
Power Dissipation	PD	100	220	190	mW
Operating Temperature Range	Topr		-20 ~ +85		°C
Storage Temperature Range	Tstg		-30 ~ +100		°C
Junction Temperature	Tj		100		°C
Lead Soldering Temperature*2	Tls		260		°C

*1: Tw=10μsec, T=10msec. *2: Time 5 Sec max; Position: Up to 3mm from the body.

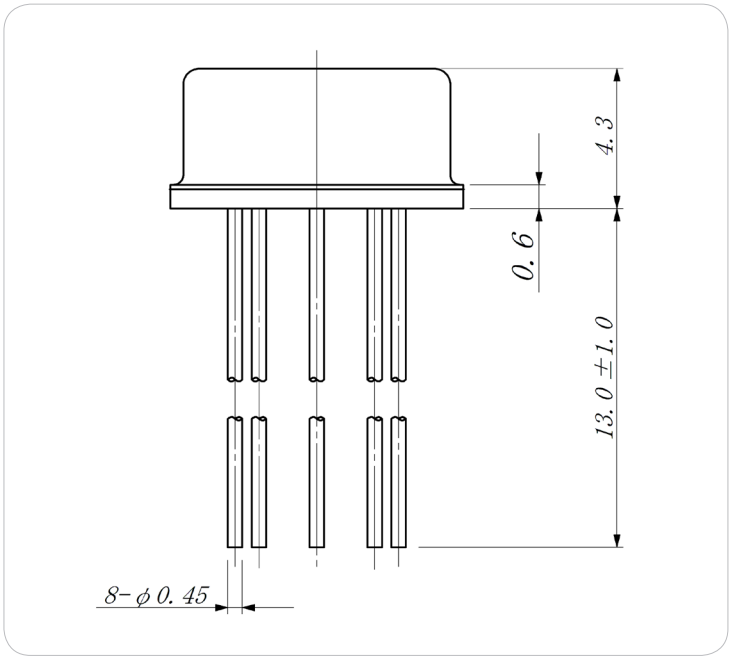
Electrical & Optical Characteristics (Ta = 25°C)

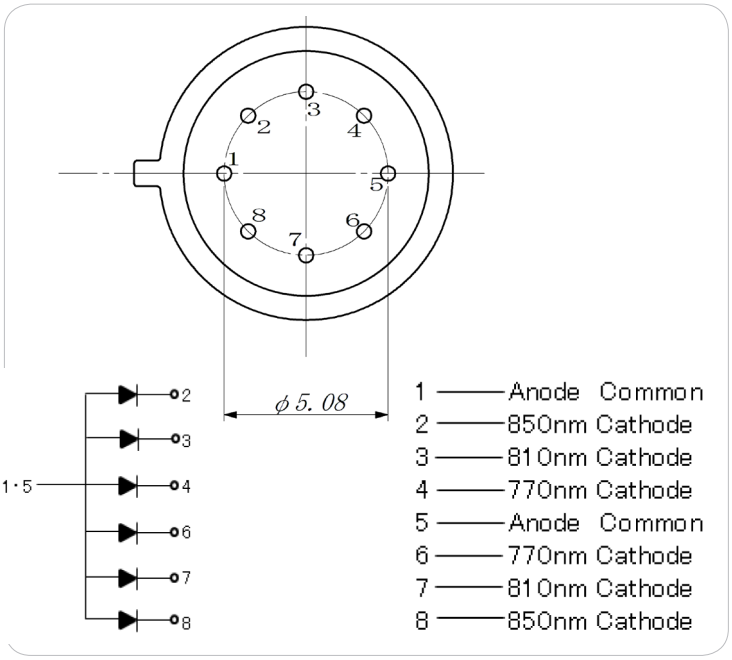
ITEMS	SYMBOL	WAVELENGTH	CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	VF	770	IF=20mA	--	1.6	2.0	V
Forward Voltage	VF	810	IF=20mA	--	1.55	1.9	V
Forward Voltage	VF	850	IF=20mA	--	1.4	1.8	V
Reverse Current	IR	--	VR=5V	--	--	100	μA
Power Output	PO	770	IF=20mA	--	3.1	--	mW
Power Output	PO	810	IF=20mA	--	3.0	--	mW
Power Output	PO	850	IF=20mA	--	2.7	--	mW
Peak Emission Wavelength	λp	770	IF=20mA	--	770	--	nm
Peak Emission Wavelength	λp	810	IF=20mA	--	810	--	nm
Peak Emission Wavelength	λp	850	IF=20mA	--	850	--	nm
Spectral Line Half Width	Δλ	770	IF=20mA	--	25	--	nm
Spectral Line Half Width	Δλ	810	IF=20mA	--	35	--	nm

2014-01-14

Electrical & Optical Characteristics (Ta = 25°C) (Continued)

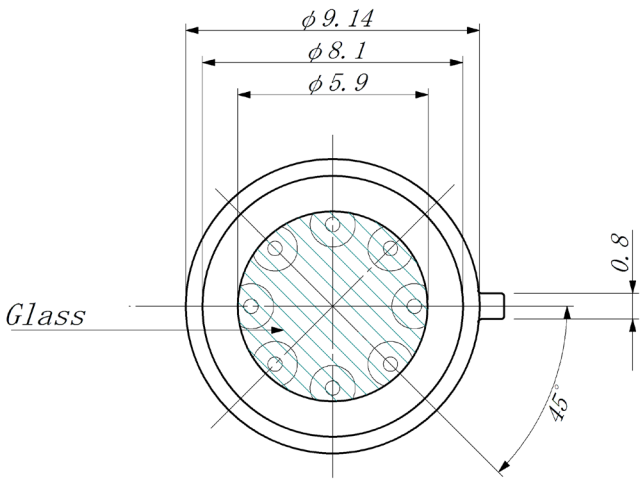
ITEMS	SYMBOL	WAVELENGTH	CONDITIONS	MIN	TYP	MAX	UNIT
Spectral Line Half Width	Δλ	850	IF=20mA	--	35	--	nm

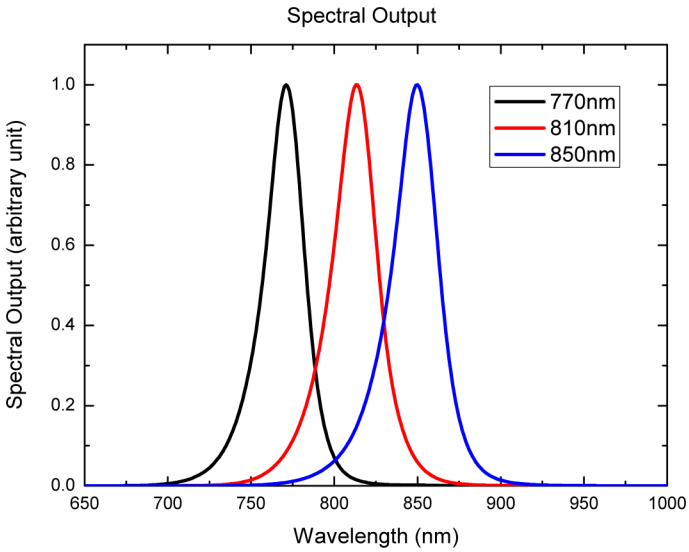




Unit: mm, Tolerance: ±0.2

2014-01-14





The information contained herein is subject to change without notice.

Global Headquarters, 3 Northway Lane North, Latham, NY 12110, USA **www.marktechopto.com**

TOLL FREE: 1-800-984-5337 • **PHONE:** 518-956-2980 • **FAX:** 518-785-4725 • **EMAIL:** info@marktechopto.com