

Peak Emission Wavelength: 770nm, 810nm, 850nm

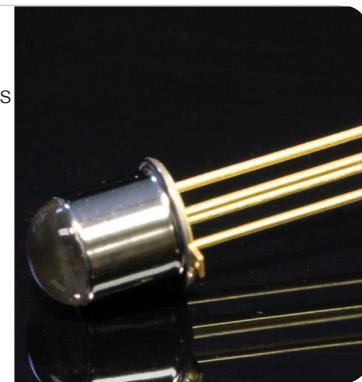
The MTMD7885NN24 is a multi-chip emitter designed for applications requiring various emission sources in a small, densely packaged area. These devices can be custom designed for specific wavelengths and outputs.

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	80	80	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

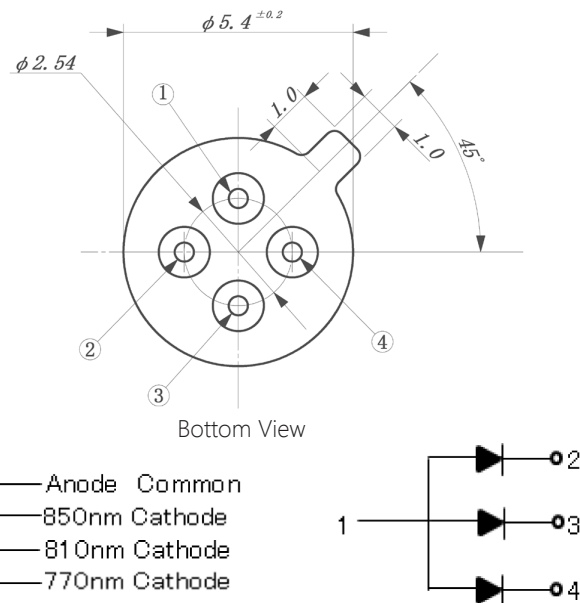
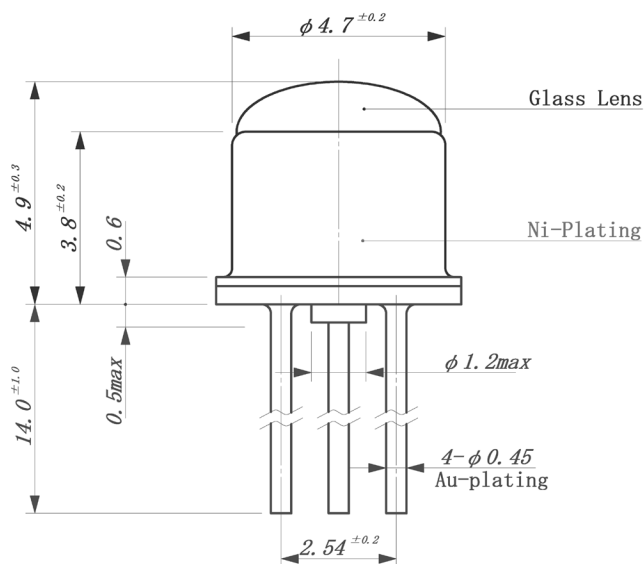
*1: Tw=10μsec, T=10msec. *2: Time 5 Sec max; Position: Up to 3mm from the body.

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	--	35	--	nm
Spectral Line Half Width	Δλ	810	IF=20mA	--	30	--	nm

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

ITEMS	SYMBOL	WAVELENGTH	CONDITIONS	MIN	TYP	MAX	UNIT
Spectral Line Half Width	$\Delta\lambda$	850	IF=20mA	--	35	--	nm
Viewing Angle	$2\theta_{1/2}$	770	IF=20mA	--	16	--	deg
Viewing Angle	$2\theta_{1/2}$	810	IF=20mA	--	25	--	deg
Viewing Angle	$2\theta_{1/2}$	850	IF=20mA	--	25	--	deg



Unit: mm, Tolerance: $\pm$ 0.2

