

## Peak Emission Wavelength: 670nm, 850nm, 950nm, 1300nm

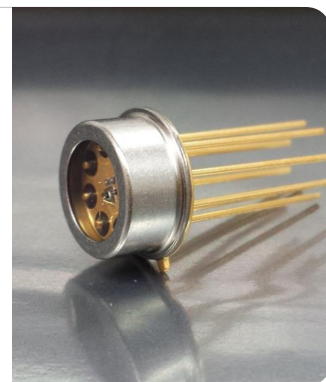
The MTMD6891T38 is a multi-chip emitter designed for applications requiring various emission sources in a small, densely packaged area. These devices can be custom designed for specific wavelengths and outputs.

### FEATURES

- > Hermetically Sealed Metal Can Package
- > High Reliability
- > High Output Power

### APPLICATIONS

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



## Absolute Maximum Ratings (Ta=25°C)



ITEMS	SYMBOL	RATINGS				UNIT
		670	850	950	1300	
Forward Current (DC)	IF	50	100	100	100	mA
Forward Current (Pulse)*1	IFP	0.5	1	1	1	A
Reverse Voltage	VR	5				V
Power Dissipation	PD	110	180	190	100	mW
Operating Temperature Range	Topr	-20 ~ +80				°C
Storage Temperature Range	Tstg	-30 ~ +100				°C
Junction Temperature	Tj	100				°C
Lead Soldering Temperature*2	Tls	260				°C

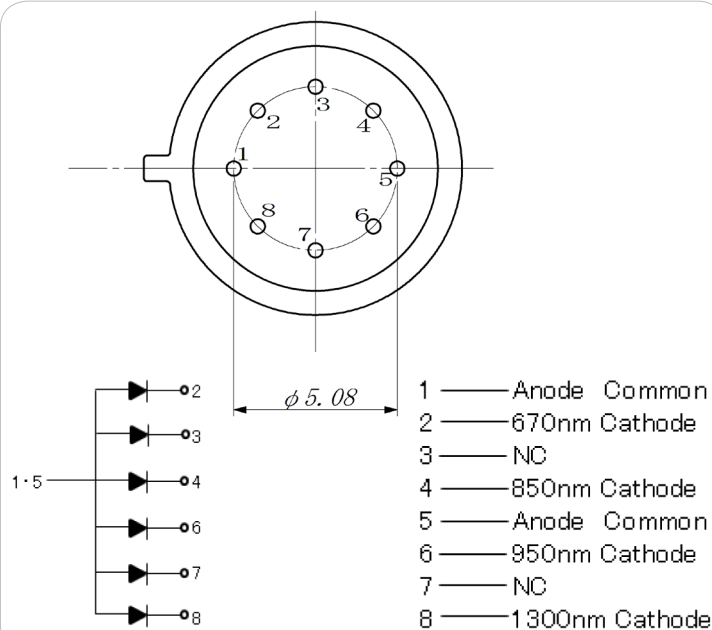
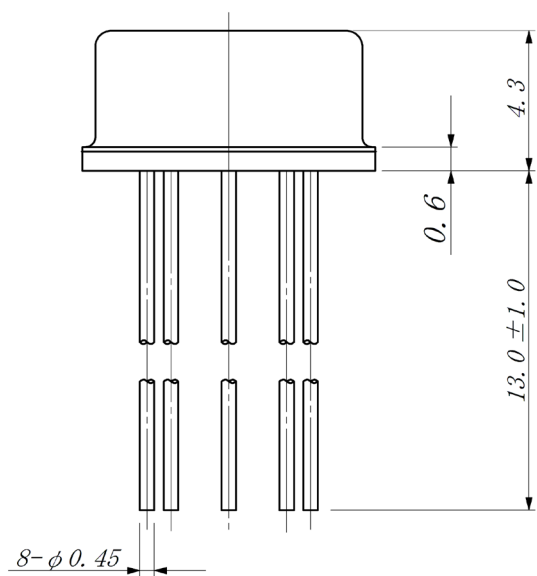
\*1: Tw=10µsec, T=10msec. \*2: Time 5 Sec max; Position: Up to 3mm from the body.

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

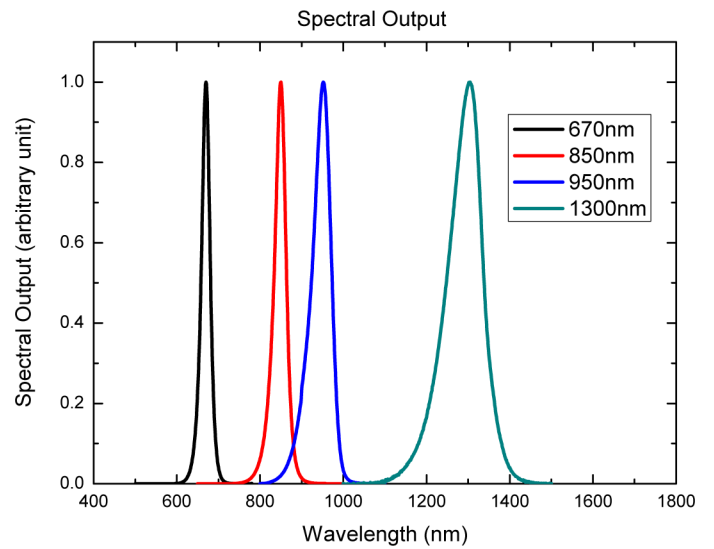
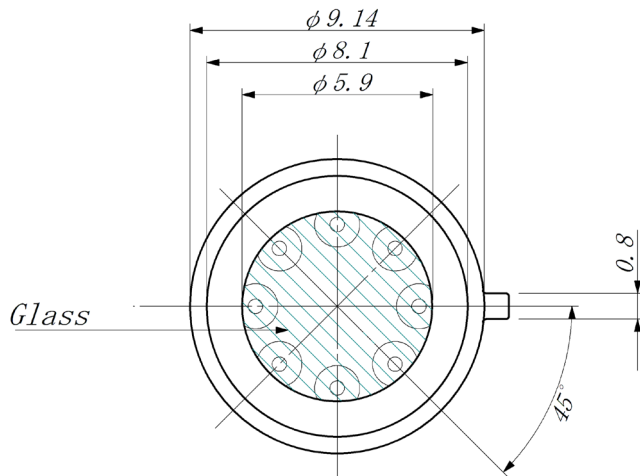
ITEMS	SYMBOL	WAVELENGTH	CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	VF	670	IF=20mA	--	1.8	2.2	V
Forward Voltage	VF	850	IF=20mA	--	1.45	1.8	V
Forward Voltage	VF	950	IF=20mA	--	1.25	1.7	V
Forward Voltage	VF	1300	IF=20mA	--	0.8	1.1	V
Reverse Current	IR		VR=5V	--	--	100	µA
Power Output	PO	670	IF=20mA	--	3.1	--	mW
Power Output	PO	850	IF=20mA	--	2.7	--	mW
Power Output	PO	950	IF=20mA	--	7.2	--	mW
Power Output	PO	1300	IF=20mA	--	0.3	--	mW
Peak Emission Wavelength	λp	670	IF=20mA	--	670	--	nm
Peak Emission Wavelength	λp	850	IF=20mA	--	850	--	nm
Peak Emission Wavelength	λp	950	IF=20mA	--	950	--	nm

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

ITEMS	SYMBOL	WAVELENGTH	CONDITIONS	MIN	TYP	MAX	UNIT
Peak Emission Wavelength	$\lambda_p$	1300	IF=20mA	--	1300	--	nm
Spectral Line Half Width	$\Delta\lambda$	670	IF=20mA	--	25	--	nm
Spectral Line Half Width	$\Delta\lambda$	850	IF=20mA	--	35	--	nm
Spectral Line Half Width	$\Delta\lambda$	950	IF=20mA	--	45	--	nm
Spectral Line Half Width	$\Delta\lambda$	1300	IF=20mA	--	70	--	nm



Unit: mm, Tolerance: ±0.2



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