Marktech Optoelectronics

Infrared Point Source Emitter

Product No: **MTPS8085MC**

Peak Emission Wavelength: 855nm

The 850nm Point Source Series is designed for applications requiring high accuracy and precision as well as uniform spectral emission. Custom package solutions and sorting are available.

FEATURES

> 3.5×2.2×1.24 Flat Top Ceramic SMT
> Emitting Window Diameter Φ 150μm
> High Reliability / High Output Power

APPLICATIONS

> Optical Scanning
> Linear & Rotary Encoder
> Edge Sensing
> Optical Sensors



Absolute Maximum Ratings (Ta=25°C)

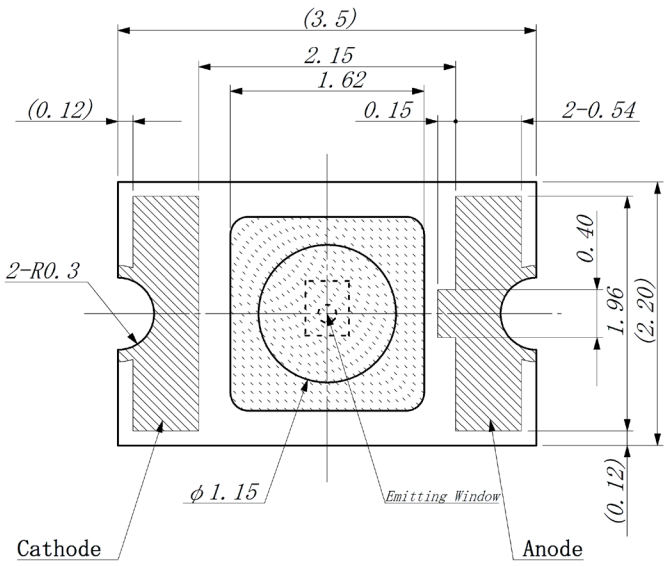
ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	100	mA
Forward Current (Pulse)*1	IFP	0.8	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	180	mW
Operating Temperature Range	Topr	-20 ~ +85	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C

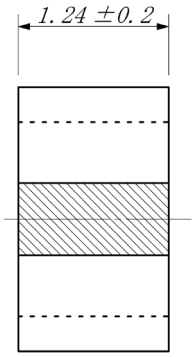
*1: Tw=10μsec, T=10msec.

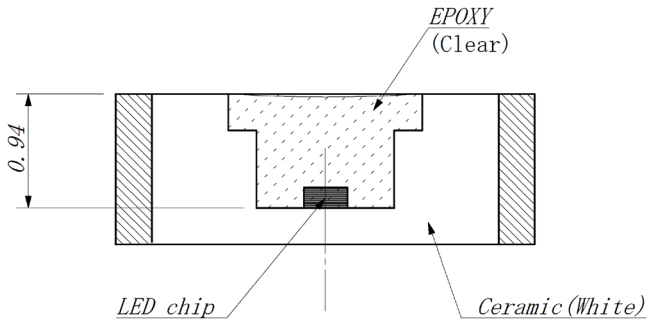
Electrical & Optical Characteristics (Ta = 25°C)

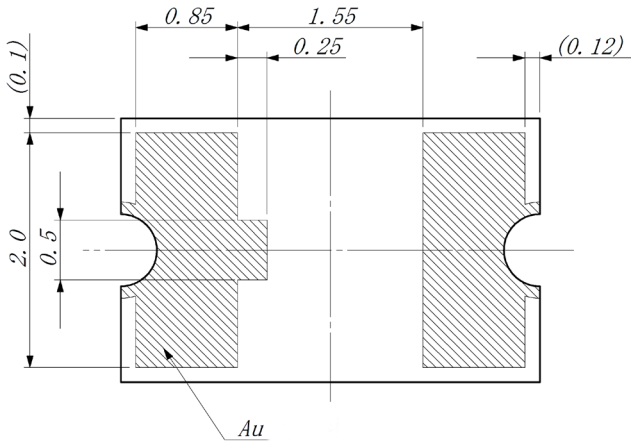
ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=20mA	--	4.5	--	mW
Forward Voltage	VF	IF=20mA	--	1.7	2.2	V
Reverse Current	IR	VR=5V	--	--	100	μA
Peak Emission Wavelength	λp	IF=20mA	--	855	--	nm
Spectral Line Half Width	Δλ	IF=20mA	--	30	--	nm
Half Intensity Beam Angle	Θ	IF=20mA	--	±50	--	deg

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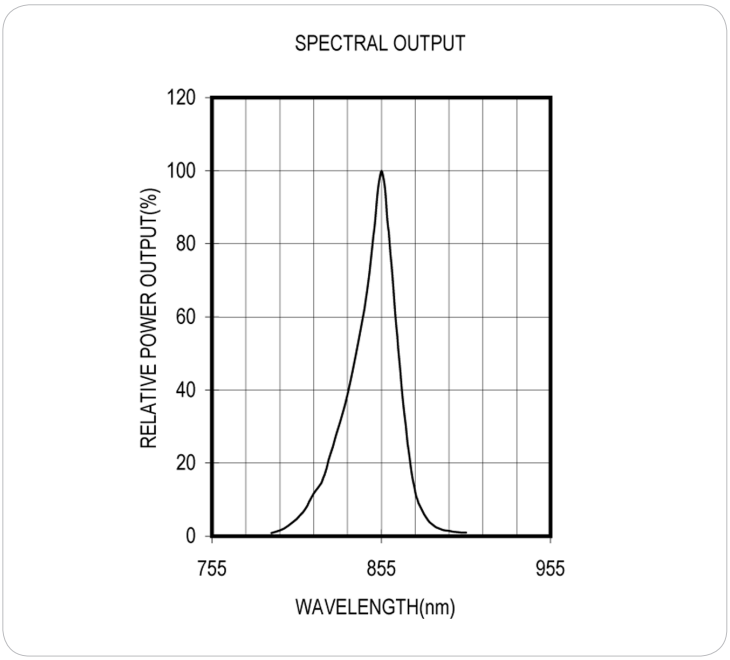


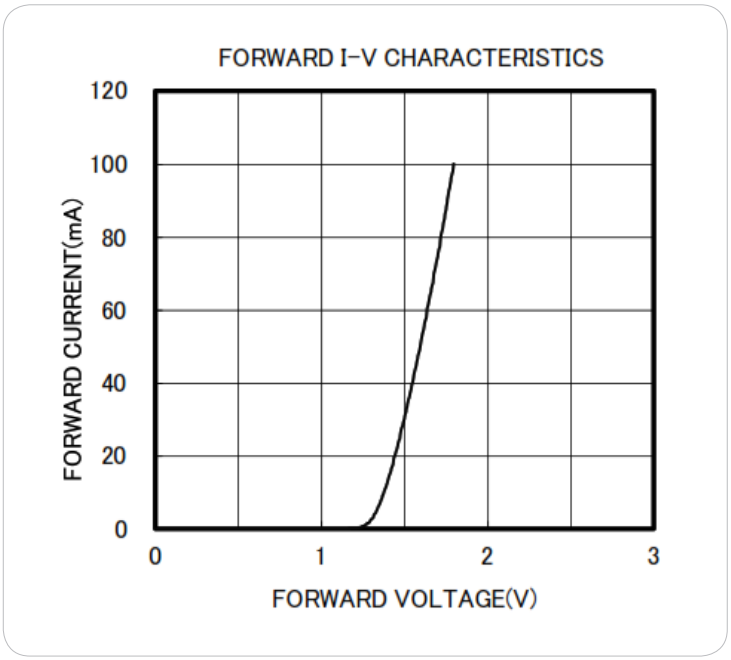


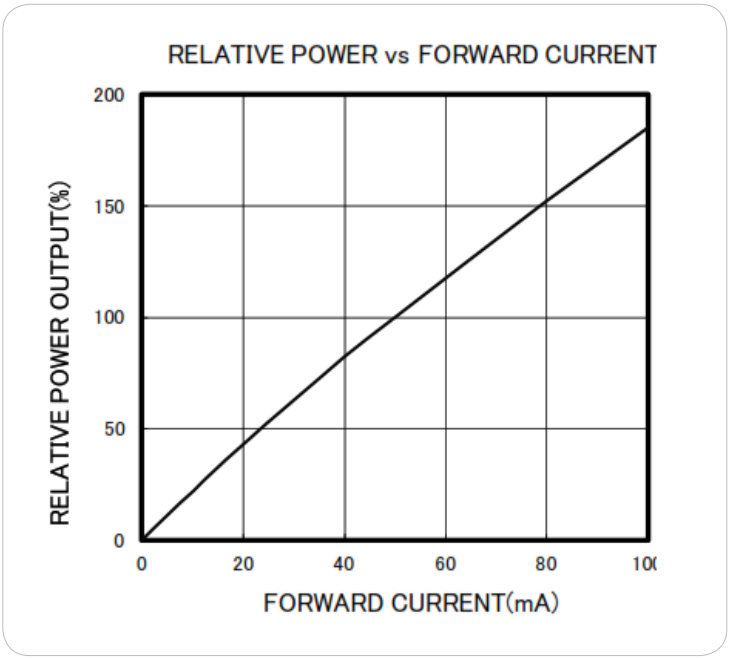


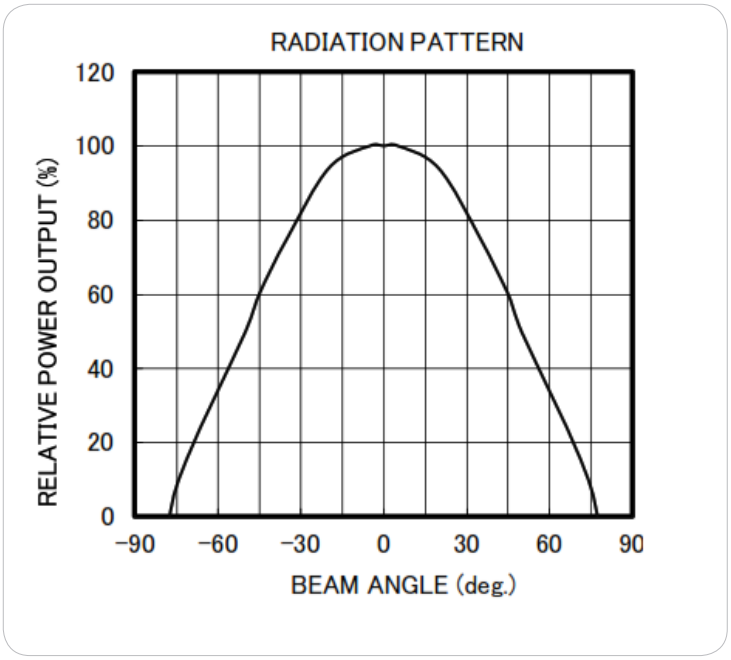
Unit: mm, Tolerance: ±0.2

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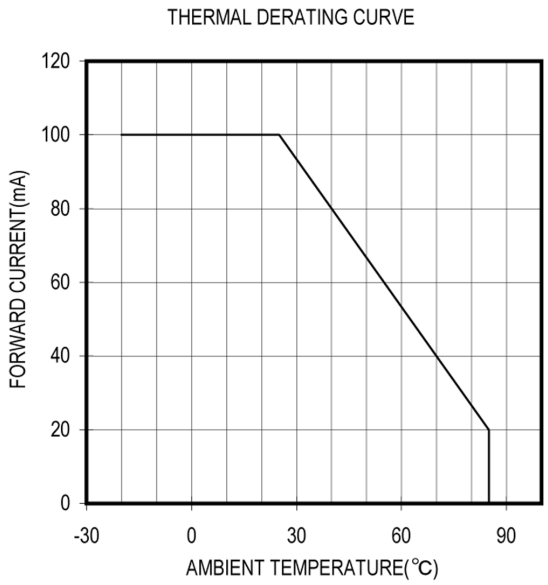

SPECTRAL OUTPUT
RELATIVE POWER OUTPUT(%)
120
100
80
60
40
20
0
755
855
955
WAVELENGTH(nm)


FORWARD I-V CHARACTERISTICS
FORWARD CURRENT(mA)
120
100
80
60
40
20
0
0
1
2
3
FORWARD VOLTAGE(V)


RELATIVE POWER vs FORWARD CURRENT
RELATIVE POWER OUTPUT(%)
200
150
100
50
0
0
20
40
60
80
FORWARD CURRENT(mA)


RADIATION PATTERN
RELATIVE POWER OUTPUT (%)
120
100
80
60
40
20
0
-90
-60
-30
0
30
60
90
BEAM ANGLE (deg.)

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The information contained herein is subject to change without notice.

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