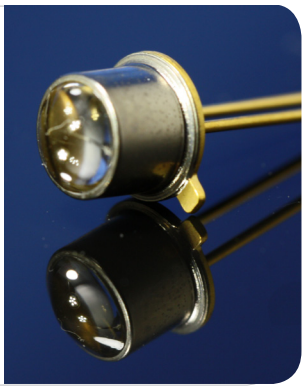
Marktech Optoelectronics

Visible Emitter

Product No: **MTE4600N**

Peak Emission Wavelength: 450nm

The 450nm visible emitter series is designed for applications requiring high output optical / mechanical axis alignment. Custom package solutions and sorting are available.



FEATURES

> TO-18 Metal Can Domed Package
> High Output
> High Reliability
> Narrow Beam Angle
> Using Cree EZ950 Series Die

APPLICATIONS

> Industrial Equipment
> Medical
> Machine Vision
> Currency Validation
> Light Source For Sensors

Absolute Maximum Ratings (Ta=25°C)

ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC) *3	IF	150	mA
Forward Current (Pulse) *1	IFP	--	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	480	mW
Operating Temperature Range	Topr-	-40 ~ +100	°C
Storage Temperature	Tstg	-40 ~ +120	°C
Junction Temperature	Tj	150	°C
Lead Soldering Temperature *2	Tls	260	°C

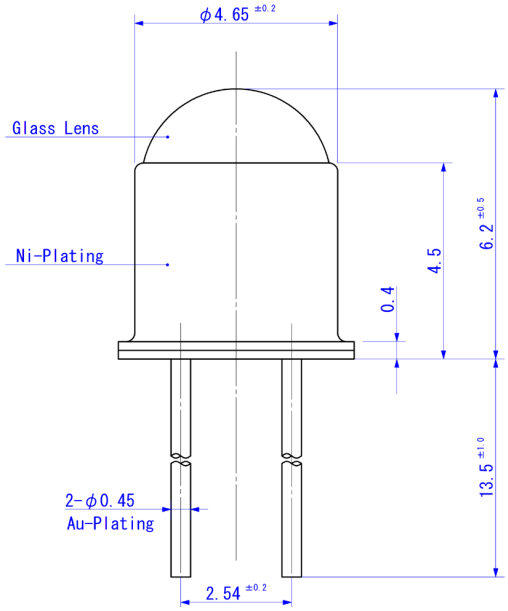
*1: Tw=10usec, T=10msec; *2: Time 5 Sec max, Position: Up to 3mm from the body *3: Proper heat sink required.

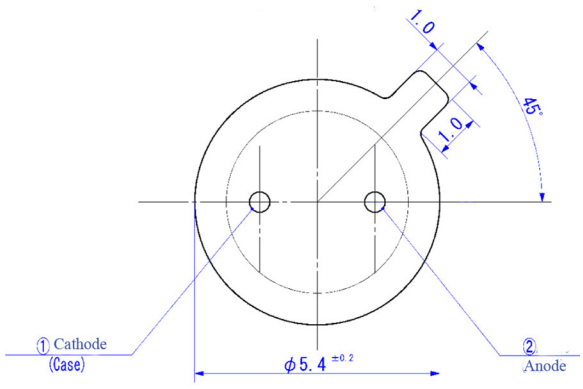
Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=50mA	--	43.2	--	mW
Forward Voltage	VF	IF=50mA	--	2.8	--	V
Reverse Current	IR	IF=50mA	--	2	--	μA
Peak Emission Wavelength	λp	IF=50mA	--	447	--	nm
Dominant Emission Wavelength	λd	IF=50mA	--	452	--	nm
Spectral Line Half Width	Δλ	IF=50mA	--	20	--	nm
Half Intensity Beam Angle	Θ	IF=50mA	--	±9	--	deg

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Package Dimensions

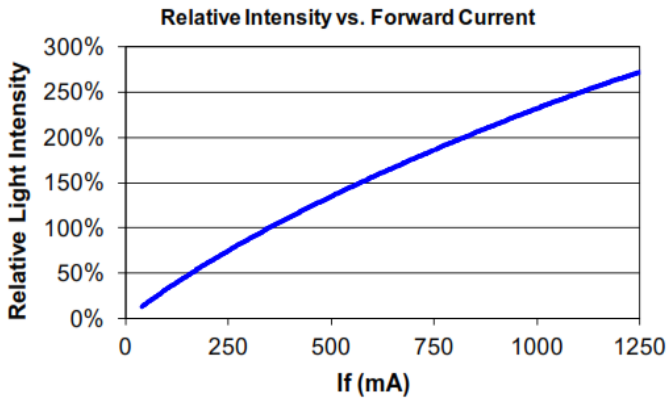


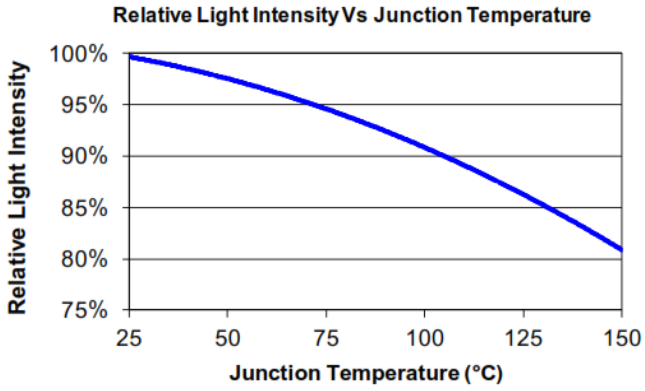


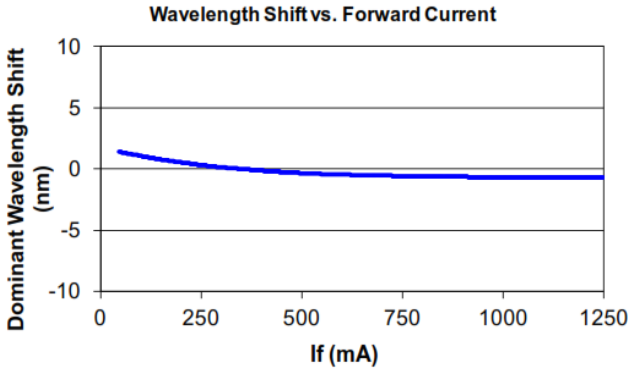
Unit: mm, Tolerance: ±0.2

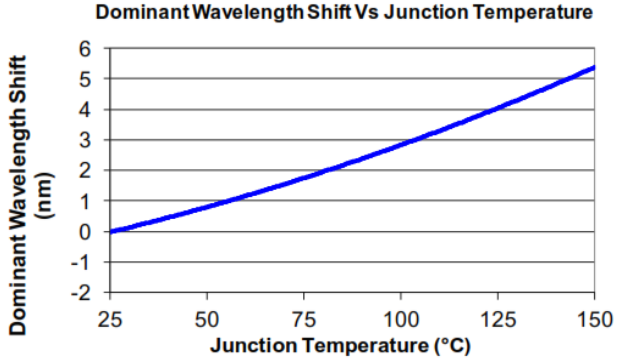
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Characteristic Curves (Ta = 25ºC)



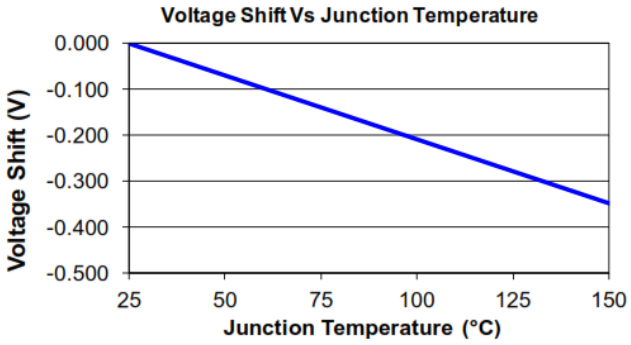


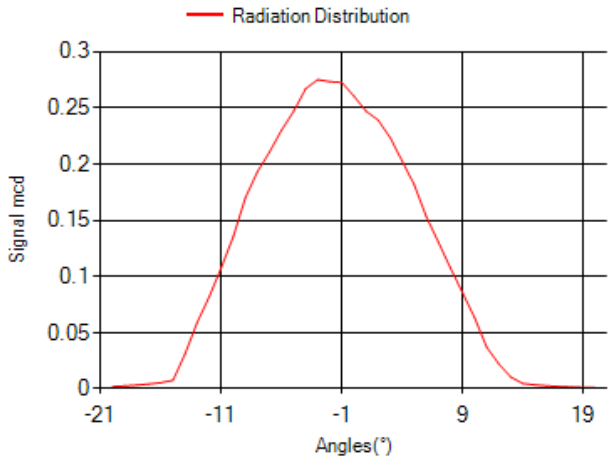


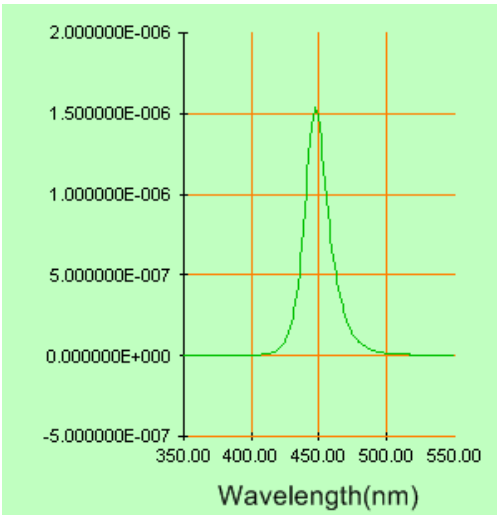


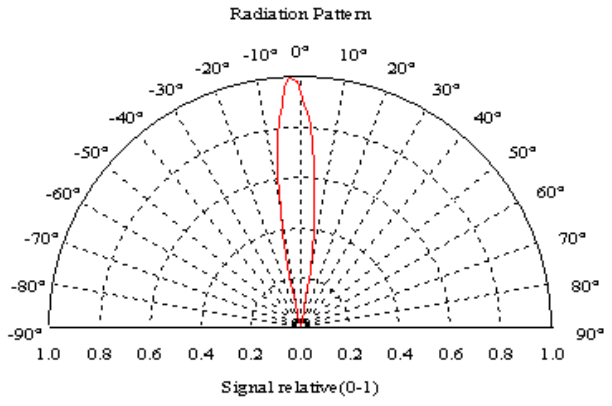
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Characteristic Curves (Ta = 25ºC)









The information contained herein is subject to change without notice.

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