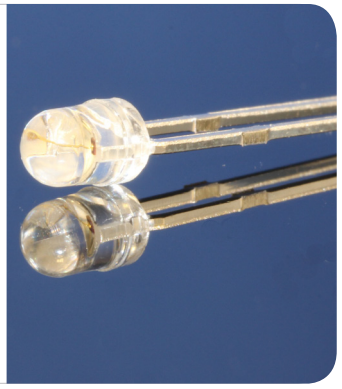
Marktech Optoelectronics

Infrared Emitter

Product No: **MTE9520C**

Peak Emission Wavelength: 950nm

The MTE9520C consists of a 950nm high output infrared die in a water-clear 3mm plastic molded package. Custom package solutions and sorting are available.



FEATURES

> High Output Power
> Compact
> High Reliability

APPLICATIONS

> Optical Switches & Sensors
> Bar Code Reader

Absolute Maximum Ratings (Ta=25°C)

ITEMS	SYMBOL	RATINGS	UNIT
Forward)	IF	60	mA
Forward Current (Pulse)*1	IFP	1	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	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	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=20mA	--	4.0	--	mW
Forward Voltage	VF	IF=20mA	--	1.2	1.5	V
Reverse Current	IR	VR=5V	--	--	10	μA
Peak Emission Wavelength	λp	IF=20mA	--	950	--	nm
Spectral Line Half Width	Δλ	IF=20mA	--	50	--	nm
Half Intensity Beam Angle	Θ	IF=20mA	--	±30	--	deg

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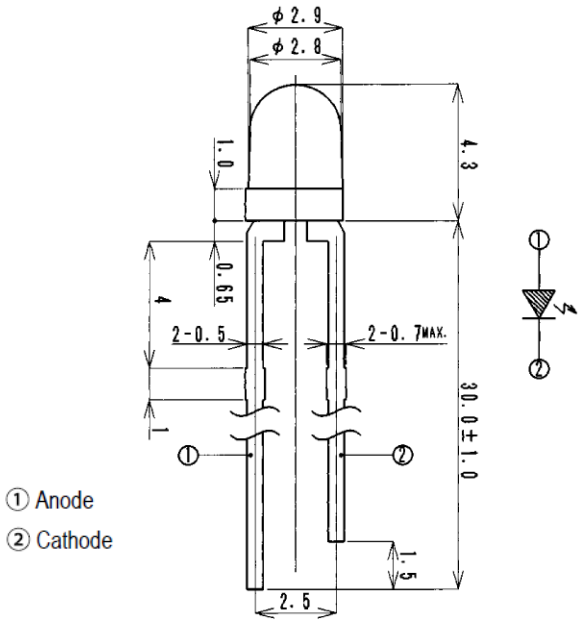

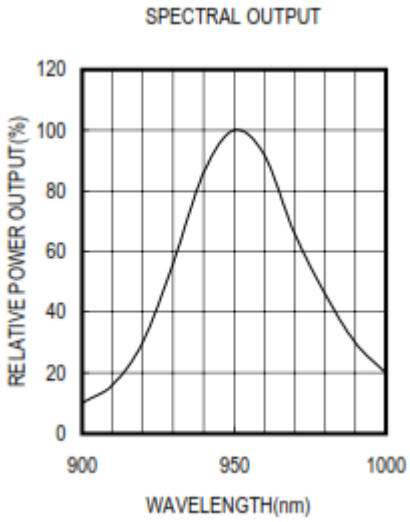

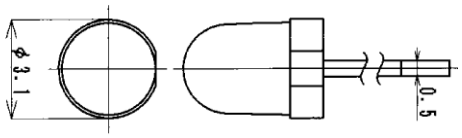

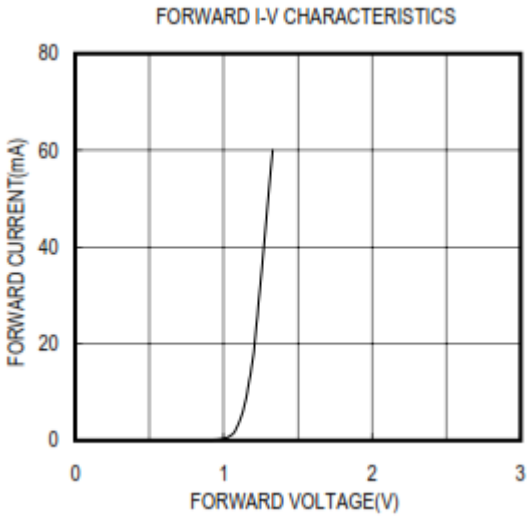

Unit: mm, Tolerance: ±0.2

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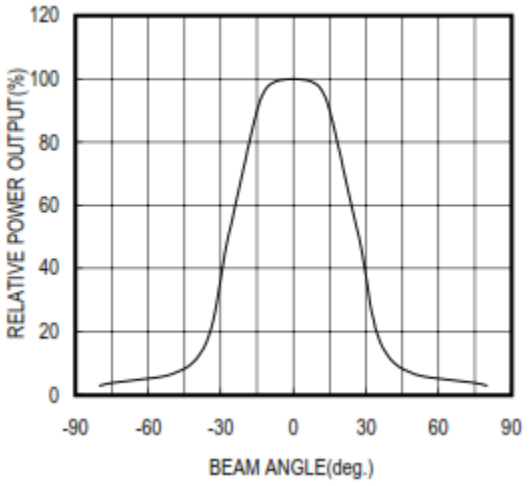
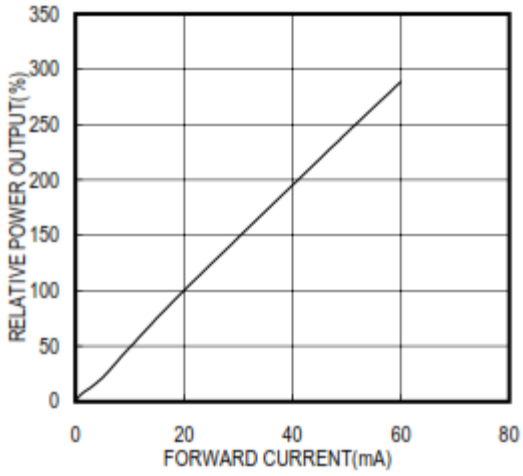
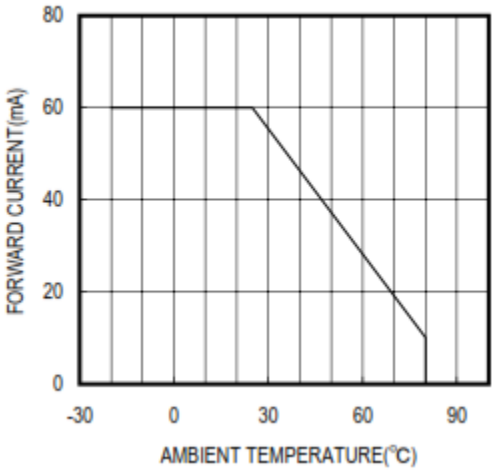
RADIATION PATTERN



RELATIVE POWER vs FORWARD CURRENT



THERMAL DERATING CURVE



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