



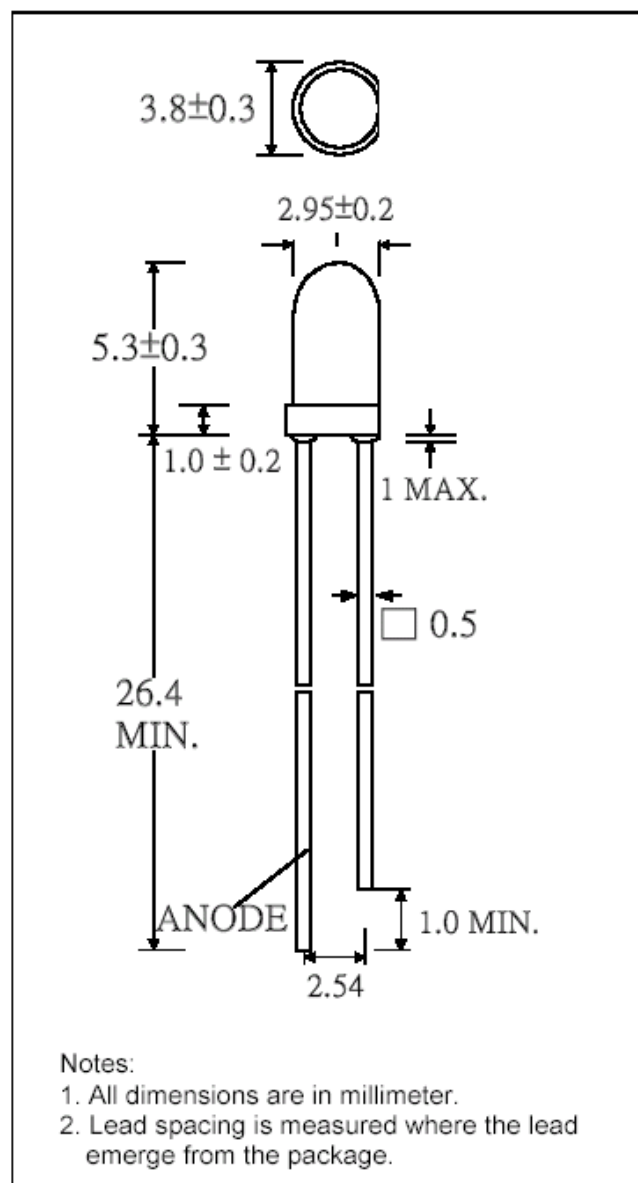
B3b-445-30

DESCRIPTION

- Super bright LED Lamp
- Round type
- T-1 3mm diameter
- Lens color: Water Clear
- With Flange
- Solder leads without stand-off

FEATURES

- Emitted color: Super Orange
- High Luminous intensity
- Technology: AlGaInP
- Peak wavelength $\lambda_p = 625\text{nm}$
- Viewing angle: 20°



SELECTION GUIDE

Chip Material	Chip Emitted	Lens Color	Viewing Angle
AlGaInP	Super Orange	Water Clear	20°



ABSOLUTE MAXIMUM RATINGS

(Ta=25

°C)

PARAMETER	SYMBOL	MAX. RATING	Unit
Power Dissipation	P _D	80	mW
Peak Forward Current (1/10 Duty Cycle @1KHz)	I _{PF}	100	mA
Continuous Forward Current	I _{AF}	50	mA
Reverse Voltage	V _R	5.0	V
Operating Temperature Range	T _{OPR}	-40~+85	°C
Storage Temperature Range	T _{STG}	-40~+85	°C

Solder temperature 1.6 mm from body for 3 seconds at 260°C

OPTICAL-ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Luminous Intensity	I _V	I _F = 20mA	1300	2000		mcd
Forward Voltage	V _F	I _F = 20mA		2.0	2.4	V
Reverse Current	I _R	V _R = 5V			10	uA
Viewing Angle	2θ1/2	I _F = 20mA		20		deg.
Peak Wavelength	λ _P	I _F = 20mA		625		nm
Dominant Wavelength	λ _D	I _F = 20mA		615		nm
Spectrum Radiation Bandwidth	Δλ	I _F = 20mA		20		nm

*Tolerance of Viewing Angle: -10 / +5 deg.



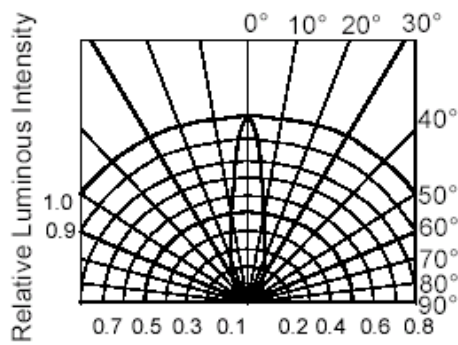
ROITHNER LASERTECHNIK

Wiedner Hauptstraße 76, A-1040 Vienna, Austria

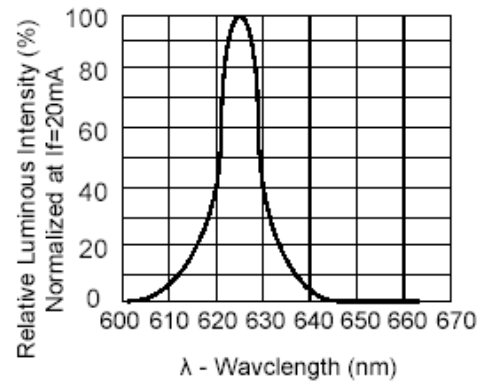
Tel.: ++43 1 586 52 43-0, Fax -44, office@roithner-laser.com



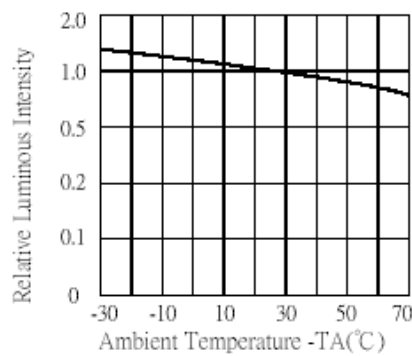
TYPICAL OPTICAL-ELECTRICAL CHARACTERISTIC CURVES



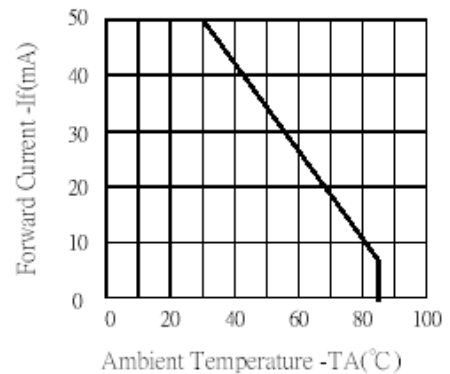
RADIATION DIAGRAM



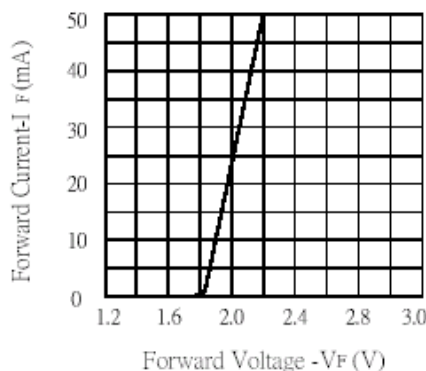
**RELATIVE LUMINOUS INTENSITY
Vs. WAVELENGTH**



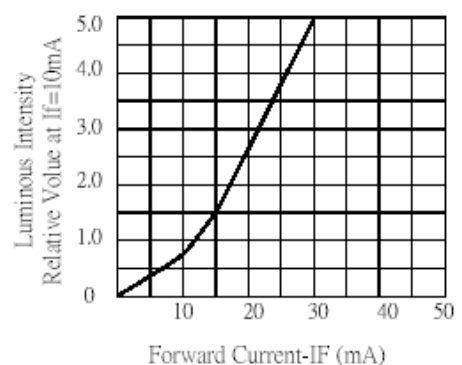
**LUMINOUS INTENSITY
Vs. AMBIENT TEMPERATURE**



**FORWARD CURRENT
Vs. AMBIENT TEMPERATURE**



**FORWARD CURRENT
Vs. FORWARD VOLTAGE**



**LUMINOUS INTENSITY
Vs. FORWARD CURRENT**