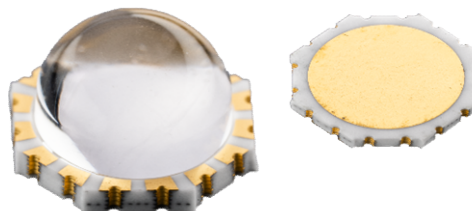


Product Specification**CQA97002UMN****260nm****UV-C LED**

creativeled.com

Features

- * Typ. Radiation of 63°
- * Based on AlGaIn substrat
- * Vacuumized Ceramic LED
- * High power and efficiency
- * Reflow-soldering
- * RoHs and REACH conform
- * Most efficient heat dissipation as backside can be soldered directly to heat sink (non-conductive)

**Applications**

Disinfection
 Phototherapy
 UV curing
 Fluorescent spectroscopy

*** Safety Note :**

This product can be driven with high level risks for human eyes and body acc. IEC 825 and EN62471

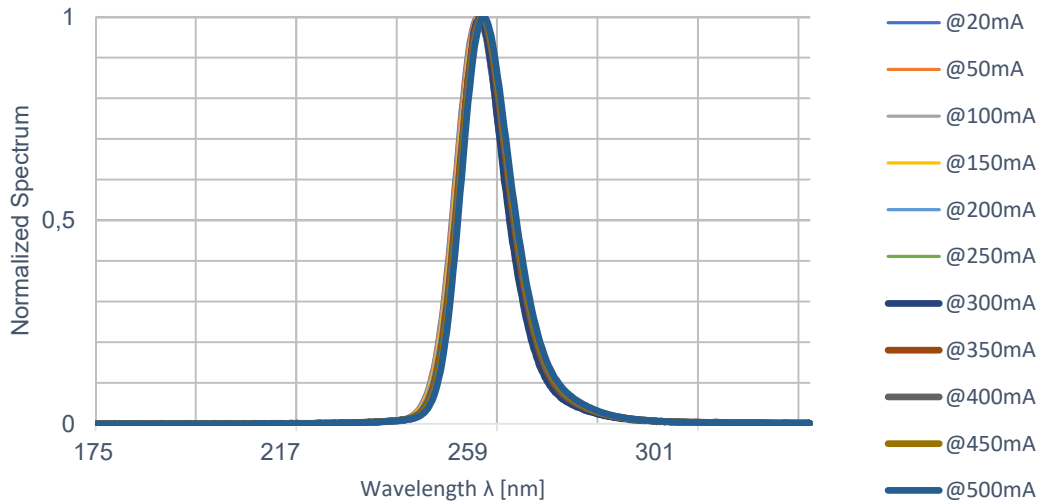
Optical and Electrical Characteristics @Tambient =25°C

Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
I F	DC Forward current			500	mA	
I Peak	Peak Forward current			3000	mA	Tp < 10µsec. ; T=1:100 ; Rtherm < 100K/W
V F	Forward Voltage	5,0		7,0	V	IF = 500mA
V R	Reverse Voltage			0	V	
λ Peak	Peak Wavelength	255		260	nm	IF = 20mA
Δλ 0,5	Bandwide of half power		13		nm	IF = 20mA
t r	Rise time		20		ns	
t f	Fall time		20		ns	
Φ E	Total Power Output	48		60	mW	IF = 500mA
I E	Radiant Intensity		15		mW/sr	IF = 350mA
2Φ 0,5	Full Emission Angle		63		deg.	ΦE = 50%
TK VF	Temp.Coeff. Of Forward Voltage		-0,01		mV/K	
T junction	LED-Junction Temperature			95	°C	
T Soldering	Soldering Temperature			240	°C	REFLOW SOLDER
T Operating	Operating Temperature	-30		85	°C	
T Storage	Storage Temperature	-40		85	°C	
R thJA	Thermal Resistance		2,3		K/W	
P tot	Total Power Dissipation			3500	mW	

CQA97002UMN

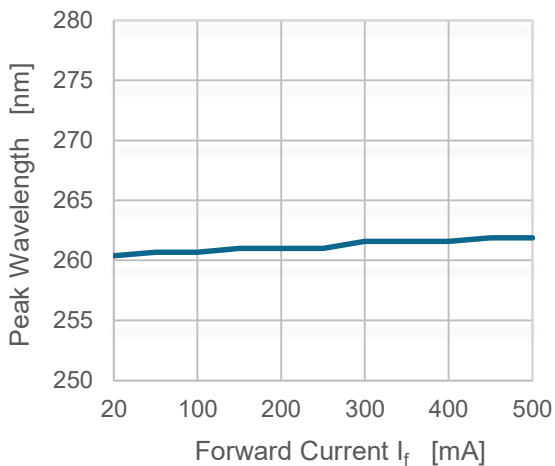
Relative Spectral Emission

@ $T_{\text{ambient}} = 25^{\circ}\text{C}$



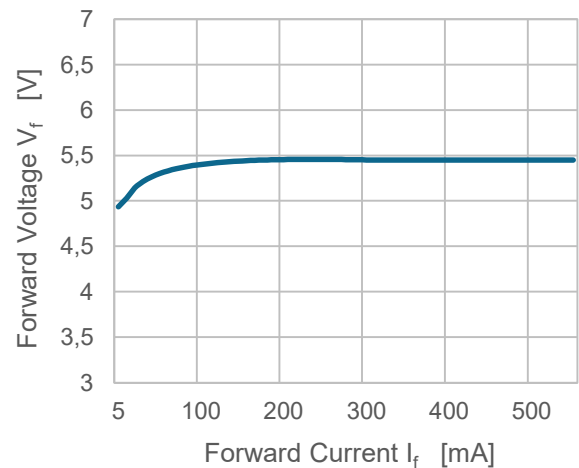
Fwd Current vs. Peak Wavelength

@ $T_{\text{ambient}} = 25^{\circ}\text{C}$



Fwd Voltage vs. Fwd Current

@ $T_{\text{ambient}} = 25^{\circ}\text{C}$

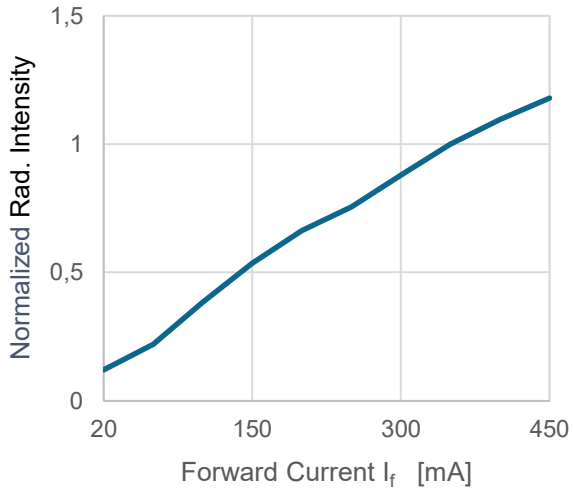


Pls. Contact us for more technical detail information !

CQA97002UMN

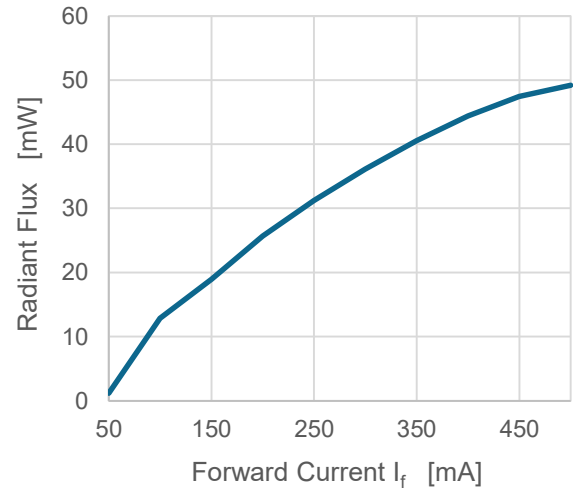
Fwd Current vs. Relative Radiant Intensity

@T_{ambient} = 25°C



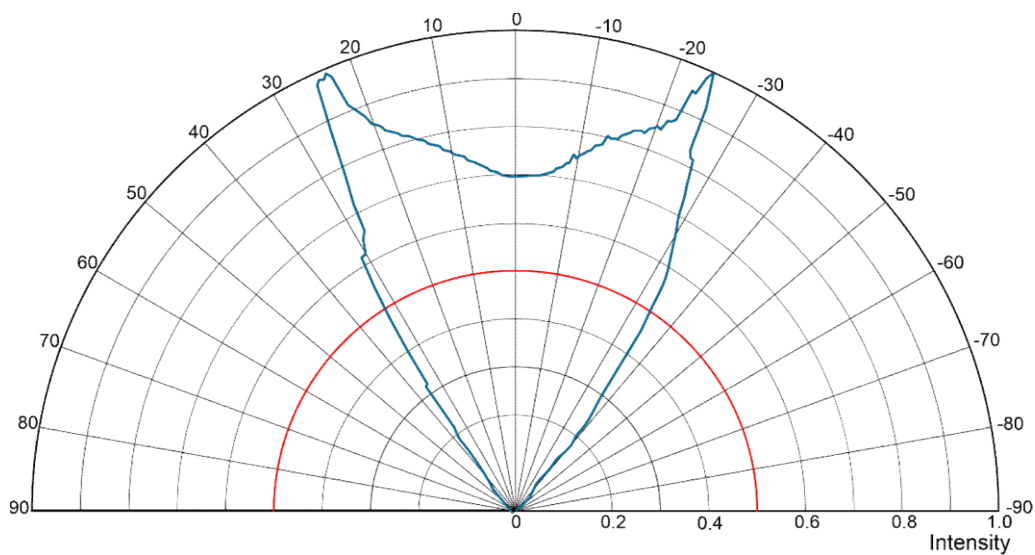
Fwd Current vs. Radiant Flux

@T_{ambient} = 25°C



Relative Radiation Angle

@20mA @ T_{ambient} = 25°C



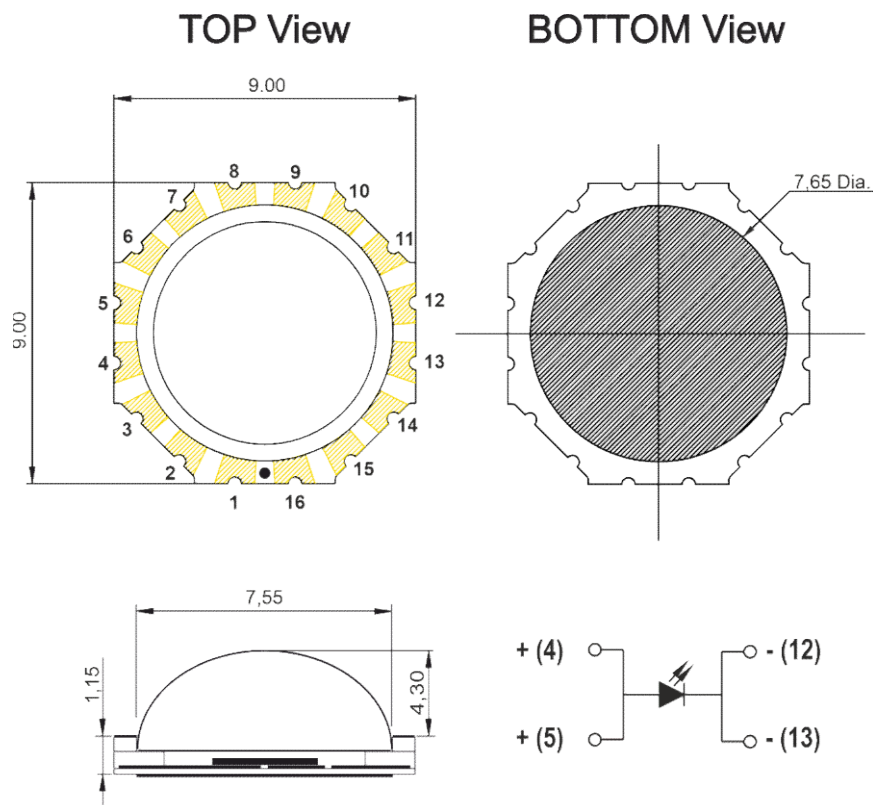
CQA97002UMN

Order informations:

CQA97002UMN

Bulk (20pcs./Bag) /standard)

Mechanical Drawing

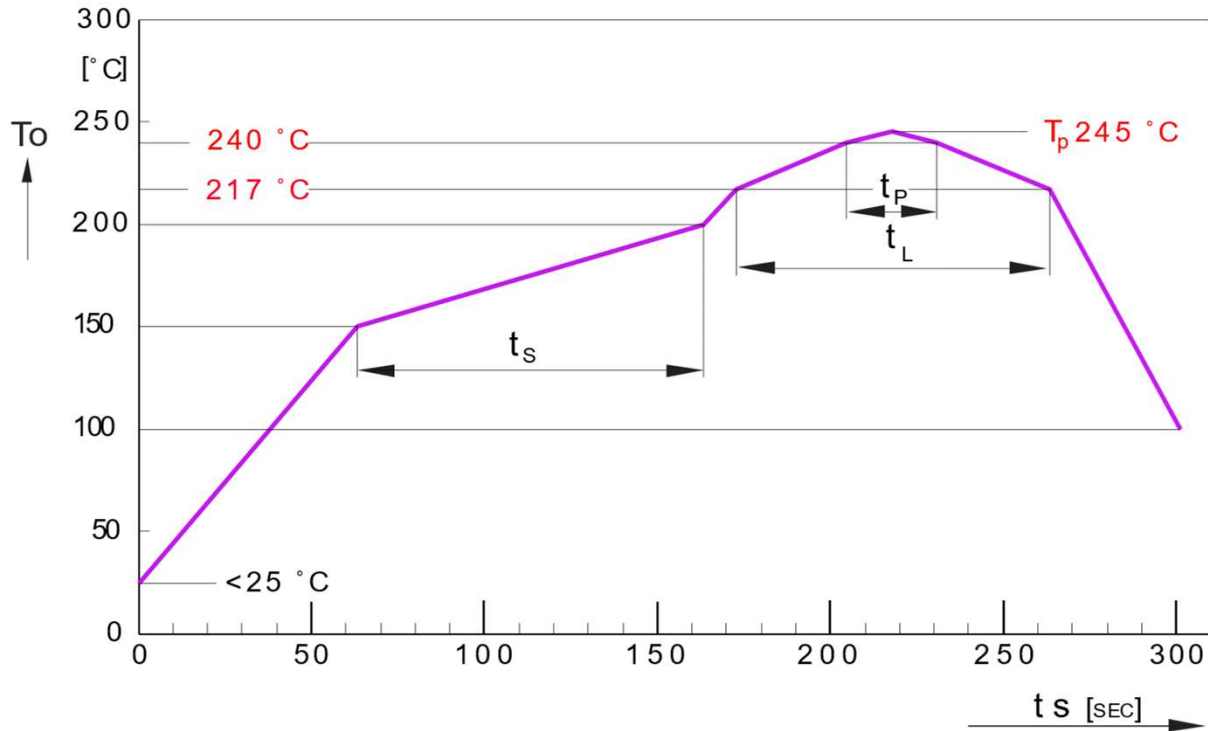


* The bottom side is not electrically conductive and can be glued or soldered directly to the heat sink.

Reflow Soldering Profil:

Reflow Soldering Profile

Prec onditioning: JEDEC Level 3 acc. to JEDEC J-STD-020D.01



PROFIL FEATURES	SYMBOL	PB-FREE (SNAAGU) ASSEMBLY			UNIT
		MINIMUM	RECOMMENDATION	MAXIMUM	
RAMP-UP RATE TO PREHEAT ⁽¹⁾ 25 °C TO 150 °C			2	3	K/SEC
TIME T_S $T_{S\text{MIN}}$ TO $T_{S\text{MAX}}$	T_S	60	100	120	SEC
RAMP-UP RATE TO PEAK ⁽¹⁾ $T_{S\text{MAX}}$ TO T_P			2	3	K/SEC
LIQUIDUS TEMPERATURE	T_L		217		$^{\circ}\text{C}$
TIME ABOVE LIQUIDUS TEMPERATURE	T_L		80	100	SEC
PEAK TEMPERATURE	T_P		240	245/260 ⁽²⁾	$^{\circ}\text{C}$
TIME WITHIN 5 °C OF THE SPECIFIED PEAKTEMPERATURE	T_{P-5K}	10	20	30	SEC
RAMP DOWN RATE T_P TO 100 °C			3	6	K/SEC
TIME 25 °C TO T_P			300	480 ⁽²⁾	SEC

ALL TEMPERATURES REFERS TO THE CENTER OF THE PACKAGES, MEASURED ON THE TOP OF COMPONENT

(1) SLOPE CALCULATION DT/DT : DT MAX.5 SEC. ; FULFILLMENT FOR THE WHOLE T-RANGE

(2) THESE MAXIMUM VALUES ARE STRONG DEPEND ON THE REFLOW-SOLDERING EQUIPMENT AND APPLICATION