Product Specification

CQR67340EBB 700nm Infrared LED

creativeled.com

Features

* Verry Narrow Radiation of 6° full angle
* Based on High Power substrat
* Fast switching time : typ. < 25ns
* High power and efficiency
* Reflow-soldering
* RoHs and REACH conform



Applications

* Machine vision of organic materials
* Photosynthesis analysis
* Photoelectric sensors & encoders
* Medical applications

*** 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			200	mA	
I Peak	Peak Forward current			400	mA	Tp < 10µsec. ; T=1:100 ; Rtherm < 100K/W
V F	Forward Voltage	2,0		3,0	V	IF = 100mA
λ Peak	Peak Wavelength	690	700		nm	IF = 20mA
Δλ 0,5	Bandwide of half power		21		nm	IF = 20mA
t r	Rise time		25		ns	
t f	Fall time		25		ns	
Φ E	Total Power Output		87		mW	IF = 100mA
I E	Radiant Intensity	650	800		mW/sr	IF = 100mA
2Φ 0,5	Full Emission Angle		6		deg.	IF = 20mA
A	Chip size		0,1296		mm²	
TK VF	Temp.Coeff. Of Forward Voltage		-1,96		mV/K	
T junction	LED-Junction Temperature			110	°C	
T Soldering	Soldering Temperature			240	°C	Iron Soldering; max 3 sec.
T Operating	Operating Temperature	-40		85	°C	
T Storage	Storage Temperature	-40		85	°C	
P tot	Total Power Dissipation			600	mW	

* values only for information

Order informations:

CQR67340EBB	Bulk (1000pcs./Bag) /standard)
CQR67340EBB-TR	Tape in Reel (1000/reel) on Request only

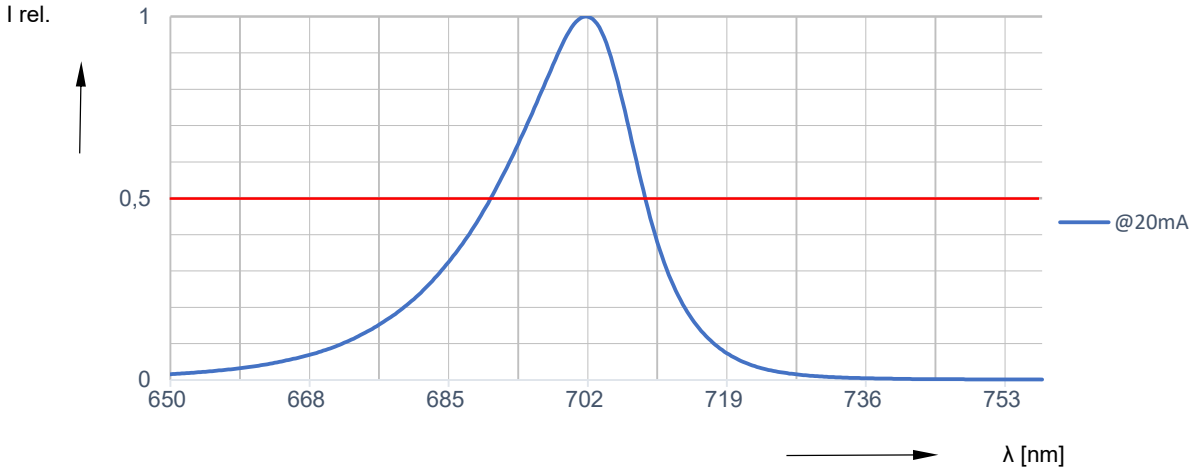
Pls. Contact us for more technical detail information !

CREATIVE LED GMBH reserves the right to make changes at any time in order to improve design and to supply the best product possible, contact us for latest device specification sheets before using.

CQR67340EBB

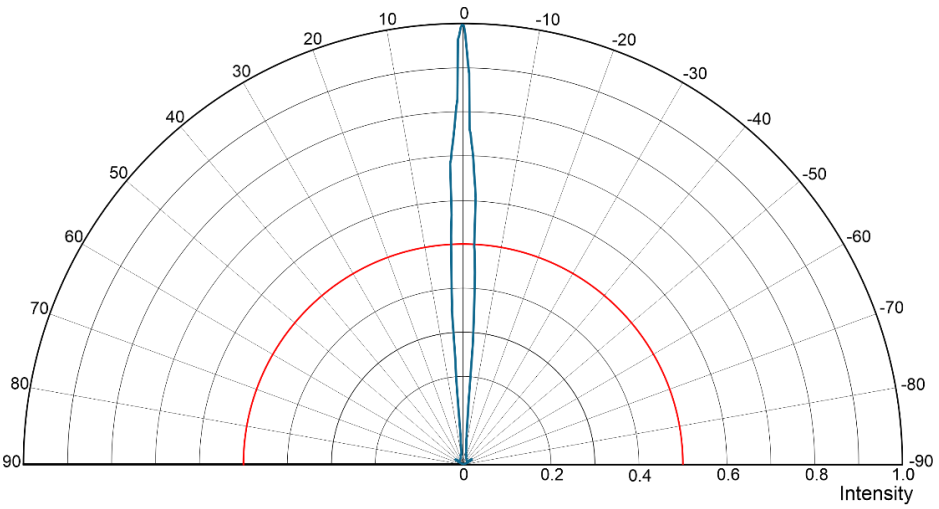
Relative Spectral Emission

@ $T_{ambient}$ = 25°C



Relative Radiation Angle

@20mA @ $T_{ambient}$ = 25°C

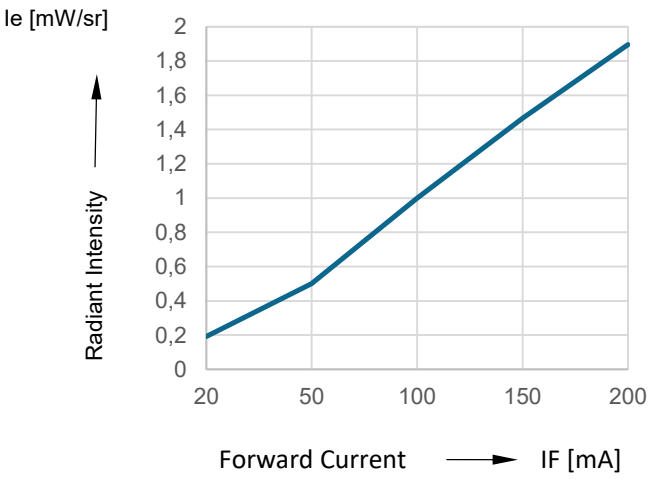


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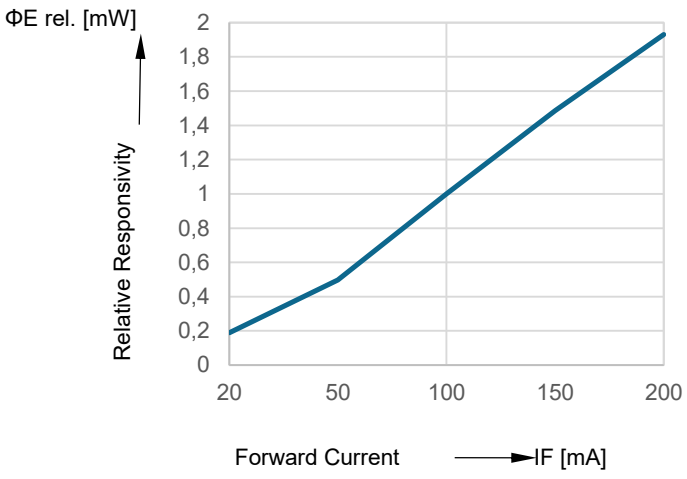
Fwd Current vs. Relative Radiant Intensity

@$T_{ambient}$ = 25°C

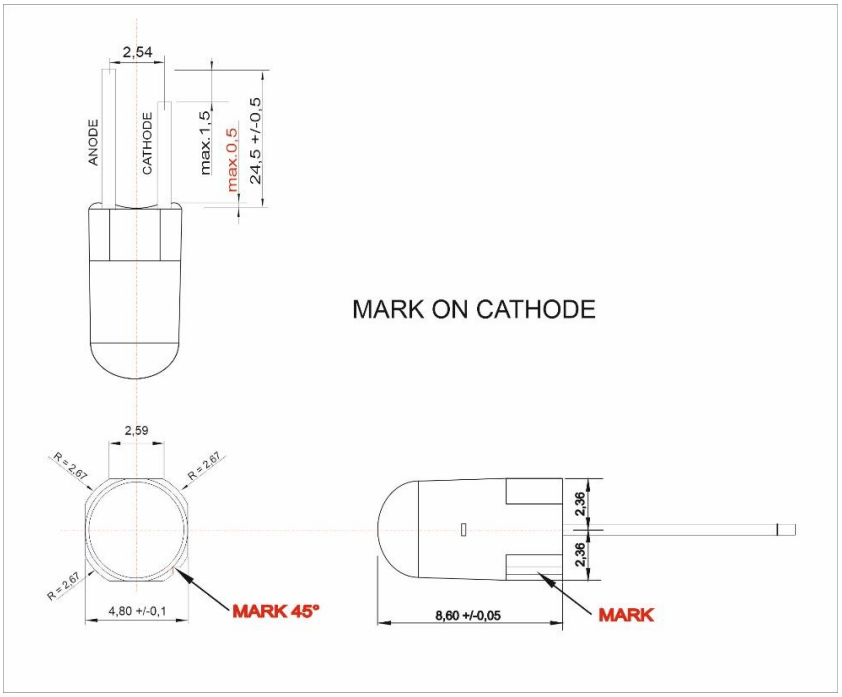


Fwd Current vs. Radiant Flux

@$T_{ambient}$ = 25°C

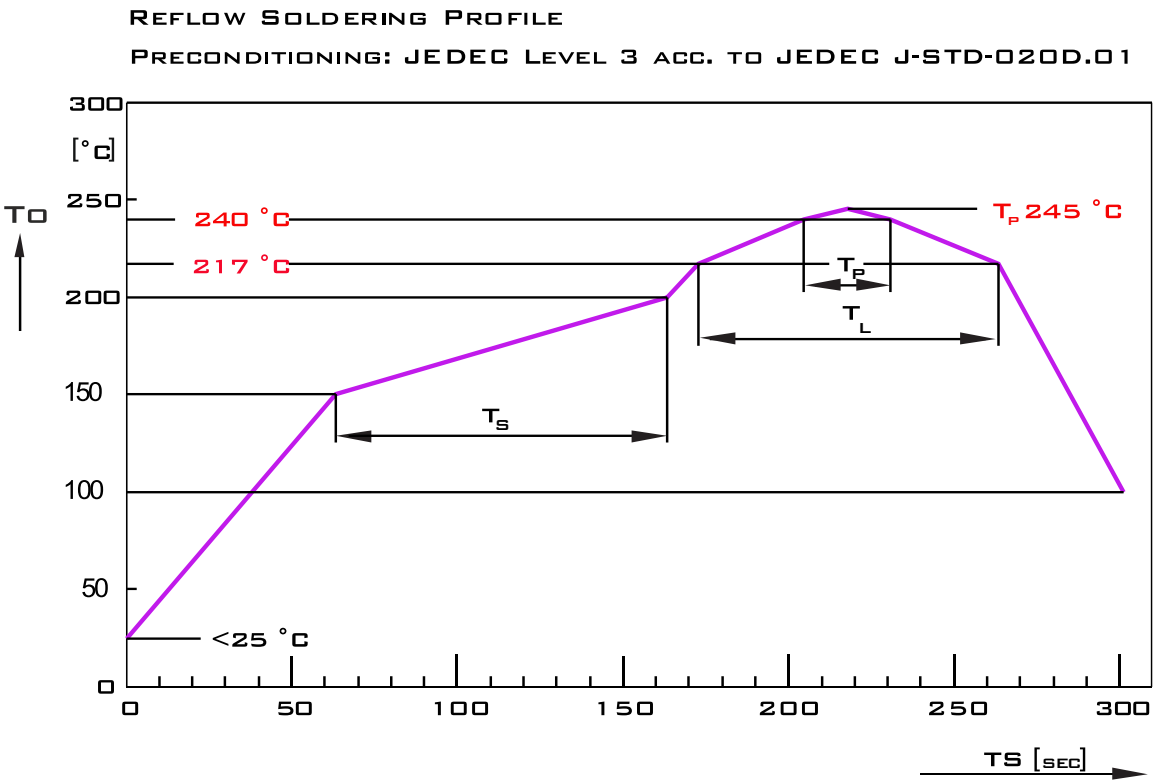


Mechanical Drawing



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Reflow Soldering Profile:



PROFIL FEATURES		PB-FREE (SNAGCU) ASSEMBLY			UNIT
	SYMBOL	MINIMUM	RECOMMENDATION	MAXIMUM	
RAMP-UP RATE TO PREHEAT [1] 25 °C TO 150 °C			2	3	K/SEC
TIME T_S T_{SMIN} TO T_{SMAX}	T_S	60	100	120	SEC
RAMP-UP RATE TO PEAK [1] T_{SMAX} TO T_P			2	3	K/SEC
LIQUDUS TEMPERATURE	T_L		217		°C
TIME ABOVE LIQUIDUS TEMPERATURE	T_L		80	100	SEC
PEAK TEMPERATURE	T_P		240	245/260[2]	°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

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