

Product Specification**CQR66593BBB****855nm****Infrared LED**

creativeled.com

Features

- * **Narrow Beam LED with typ. 6 degree full angle**
- * Standard design LED for general purpose
- * Fast switching time : typ. <25ns
- * Water-Clear package
- * Mountable in 5,0mm rater
- * **RoHs and REACH conform**
- * Reflowable Version available
- * SMT-Version tape & reeled for automatic placing CQS66593BBB

**Applications**

Cat-2 Safty Light Guards
 IR- Flash-Light
 Medical instruments
 Light Interrupter and switches

*** Safety Note:**

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

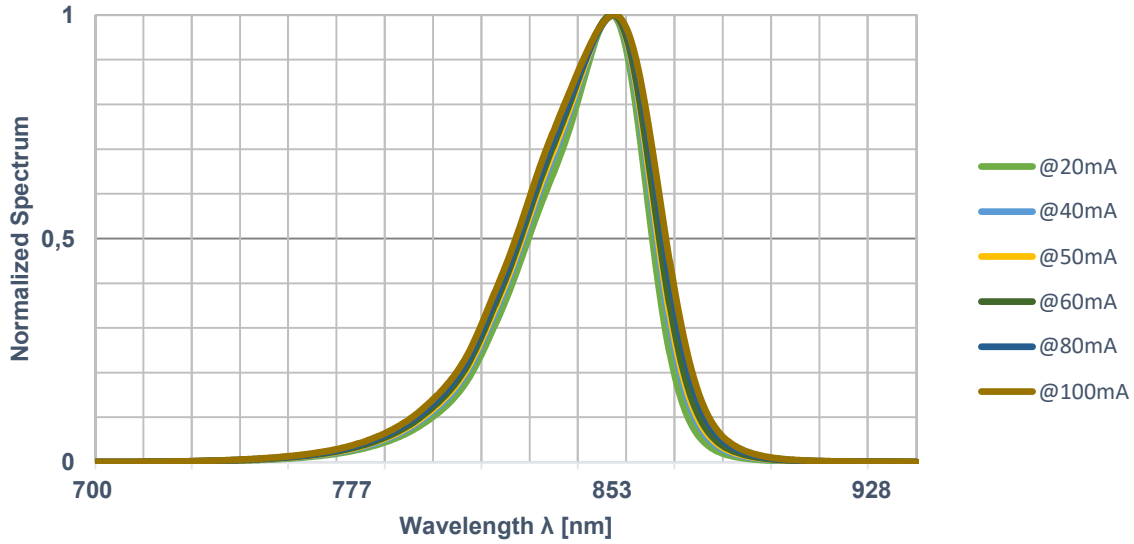
Optical and Electrical Characteristics @Tambient =25°C

Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
I F	DC Forward current			100	mA	
I Peak	Peak Forward current			2000	mA	Tp < 10µsec. ; T=1:100 ; Rtherm < 100K/W
V F	Forward Voltage	1,3		1,9	V	IF = 100mA
V R	Reverse Voltage	5			V	Irev = 100µA
λ Peak	Peak Wavelength	850	855	865	nm	IF = 100mA
Δλ 0,5	Bandwide of half power		40		nm	IF = 100mA
t r	Rise time			25	ns	IF = 100mA
t f	Fall time			25	ns	IF = 100mA
Φ E	Total Power Output	55	58		mW	IF = 100mA
I E	Radiant Intensity		450		mW/sr	IF = 100mA
A	Chip size		0,13		mm ²	
2Φ 0,5	Full Emission Angle		5,5		deg.	ΦE = 50%
TK VF	Temp.Coeff. Of Forward Voltage		-2		mV/K	
TK F	Temp. Coeff. Of Radiant Power		-0,5		%/K	
T junction	LED-Junction Temperature		110	115	°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	
R thJA	Thermal Resistance		450		K/W	
P tot	Total Power Dissipation			190	mW	derate above 45°C 2,5mW/K

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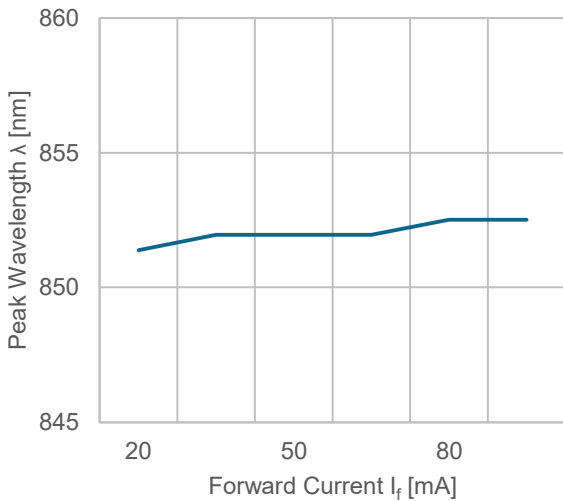
Relative Spectral Emission

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



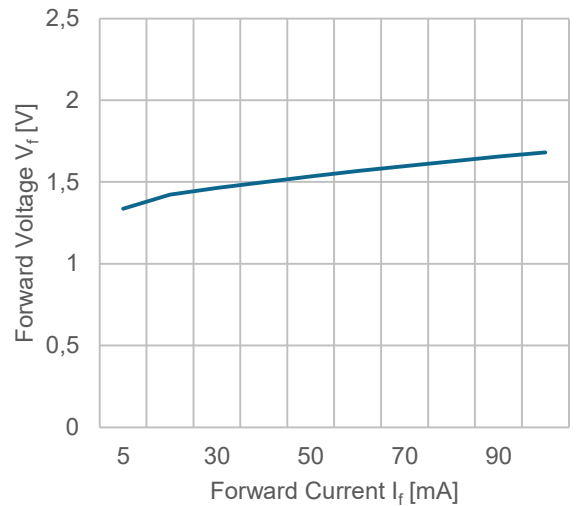
Fwd Current vs. Peak Wavelength

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



Fwd Voltage vs. Fwd Current

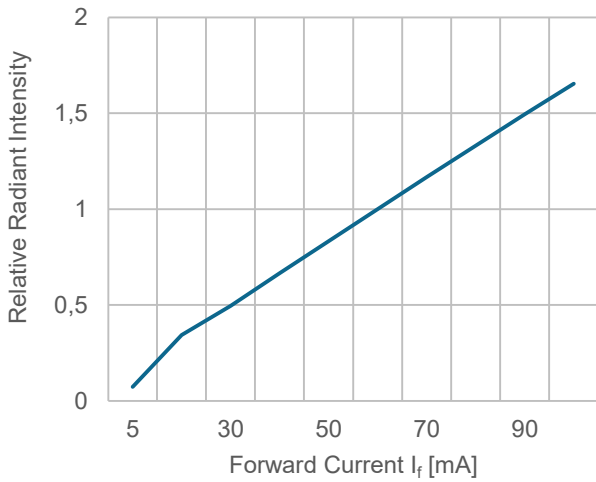
@ $T_{\text{ambient}} = 25^{\circ}\text{C}$



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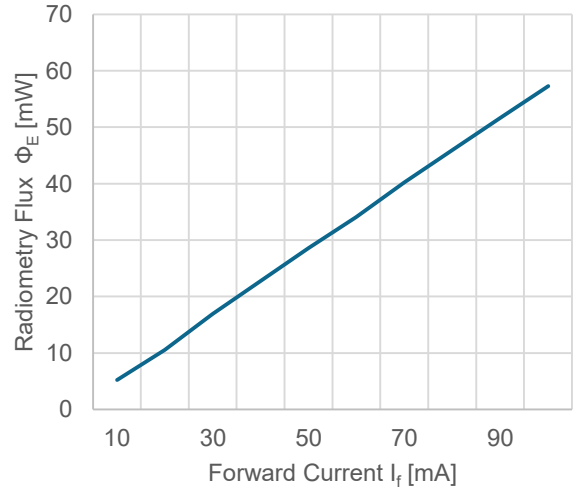
Fwd Current vs. Relative Radiant Intensity

@T_{ambient} = 25°C



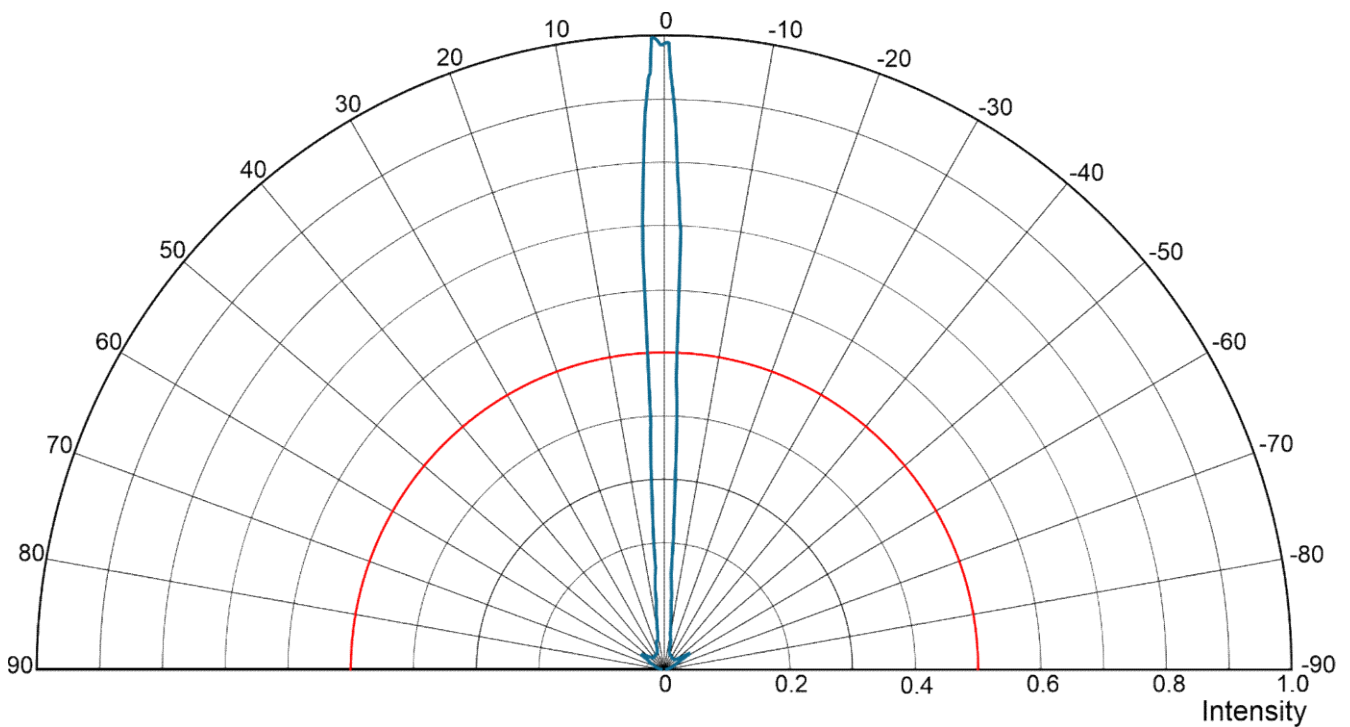
Fwd Current vs. Radiant Flux

@T_{ambient} = 25°C



Relative Radiation Angle

@20mA @ T_{ambient} = 25°C



Pls. Contact us for more technical detail information !

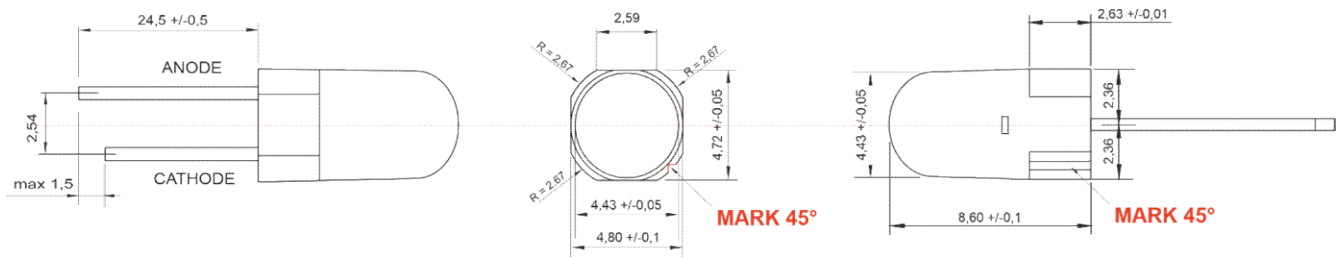
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Order informations:

CQR66593BBB

Bulk (1000pcs./Bag) /standard)

Mechanical Drawing



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.