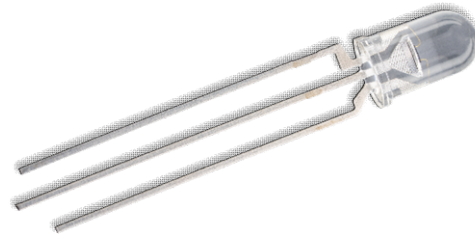


Product Specification**CQR59570ADETF****870nm****IR LED
Edged Corner Bonded**creativeled.com**Features**

- * Standard design LED for general purpose
- * **Oval oval beam characteristic with typ. 25° / 18°**
- * Fast switching time : typ. <25ns
- * Water-Clear package
- * Reflowable Version available
- * **RoHs and REACH conform**

**Applications**

Open-Air communication / IrDa
 IR- Flash-Light
 Medical instruments
 Light Interrupter and switches

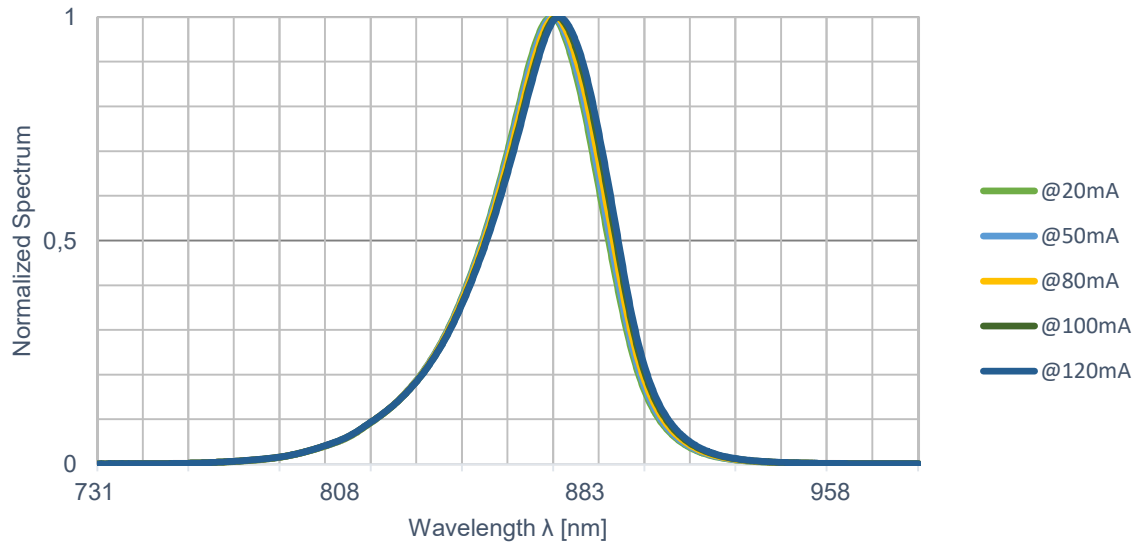
Optical and Electrical Characteristics @Tambient =25°C

Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
I F	DC Forward current			250	mA	
I Peak	Peak Forward current			3000	mA	Tp < 10μsec. ; T=1:100 ; Rtherm < 100K/W
V F	Forward Voltage	1,2		1,8	V	IF = 100mA
V R	Reverse Voltage	5			V	Irev = 100μA
λ Peak	Peak Wavelength	860	870	880	nm	IF = 100mA
Δλ 0,5	Bandwide of half power		30		nm	IF = 100mA
t r	Rise time			25	ns	IF = 100mA
t f	Fall time			25	ns	IF = 100mA
Φ E	Total Power Output	48	53		mW	IF = 100mA
I E	Radiant Intensity		80		mW/sr	IF = 100mA
A	Chip size		0,33		mm²	
2Φ 0,5	Full Emission Angle X-axis		25	27	deg.	
2Φ 0,5	Full Emission Angle Y-axis		18	20	deg.	
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			100	°C	
T Soldering	Soldering Temperature		240		°C	Iron Soldering; max 3 sec.
T Operating	Operating Temperature	-25		+85	°C	
T Storage	Storage Temperature	-25		+85	°C	
R thJA	Thermal Resistance		450		K/W	
P tot	Total Power Dissipation			450	mW	derate above 45°C 2,5mW/K

CQR59570ADETF

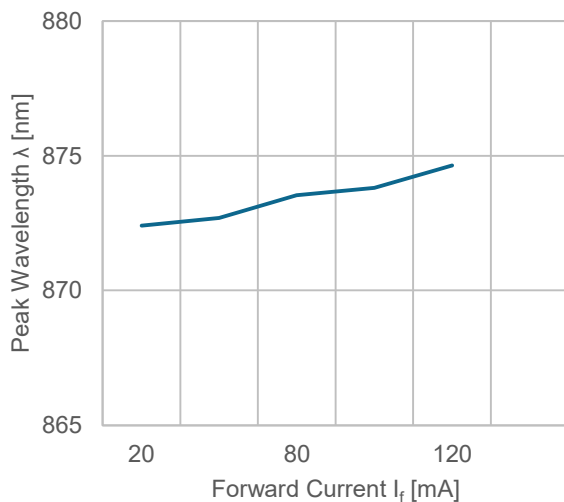
Relative Spectral Emission

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



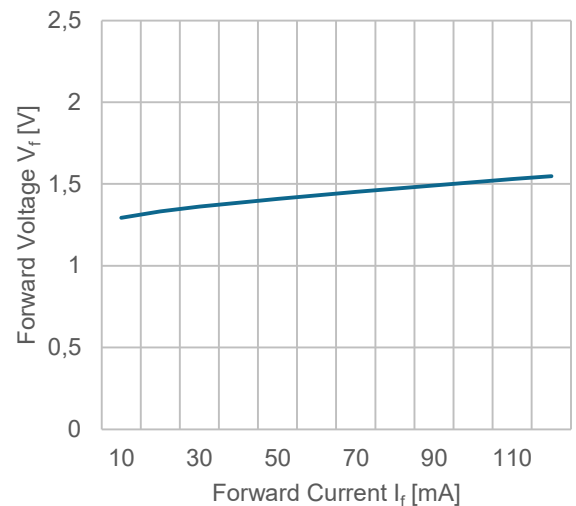
Fwd Current vs. Peak Wavelength

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



Fwd Voltage vs. Fwd Current

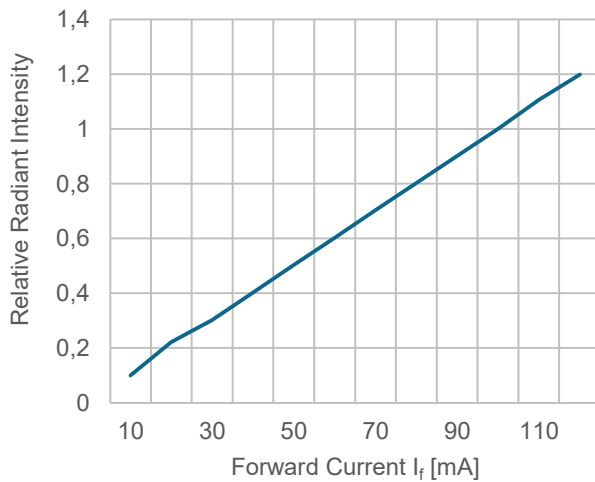
@ $T_{\text{ambient}} = 25^{\circ}\text{C}$



CQR59570ADETF

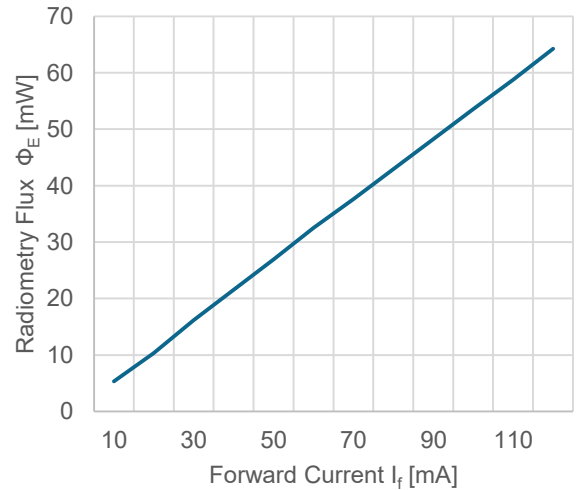
Fwd Current vs. Relative Radiant Intensity

@T_{ambient} = 25°C



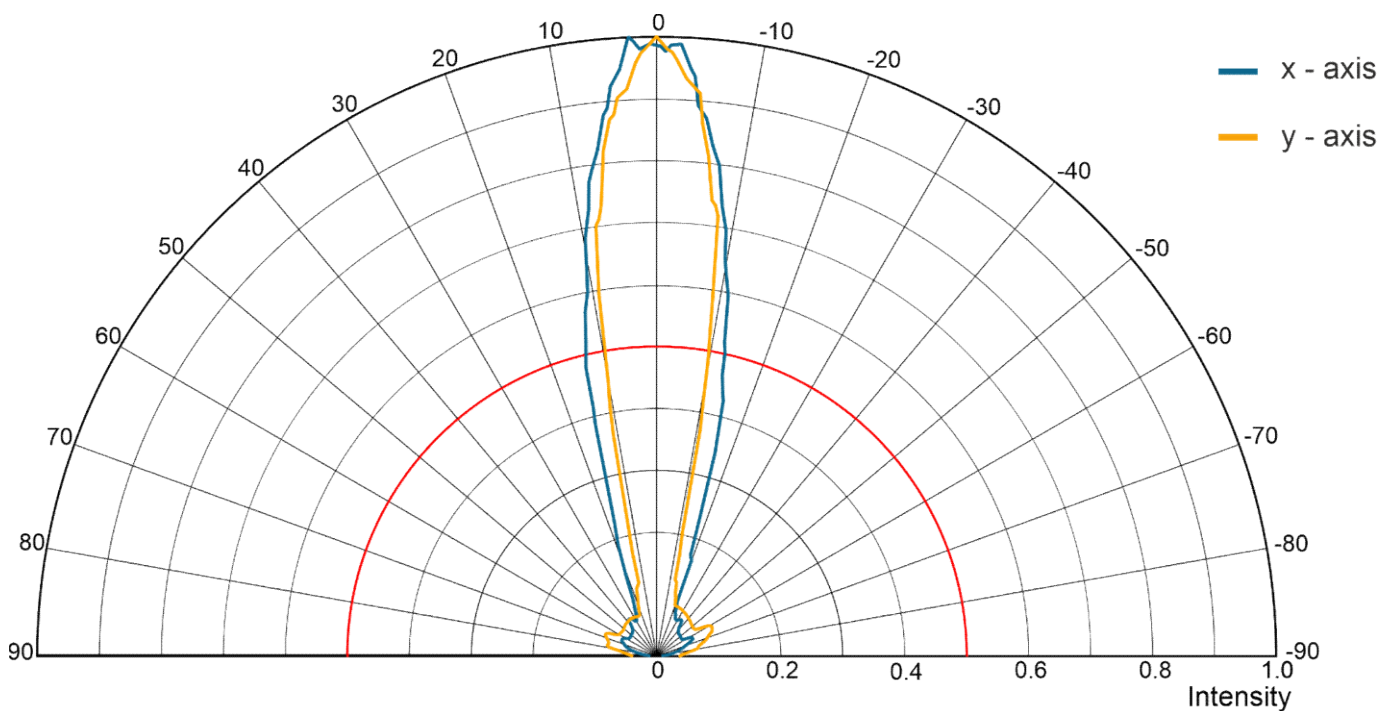
Fwd Current vs. Radiant Flux

@T_{ambient} = 25°C



Relative Radiation Angle

@20mA @ T_{ambient} = 25°C



Pls. Contact us for more technical detail information !

CQR59570AETF

Order informations:

CQR59570AETF

Bulk (1000pcs./Bag) /standard)

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.