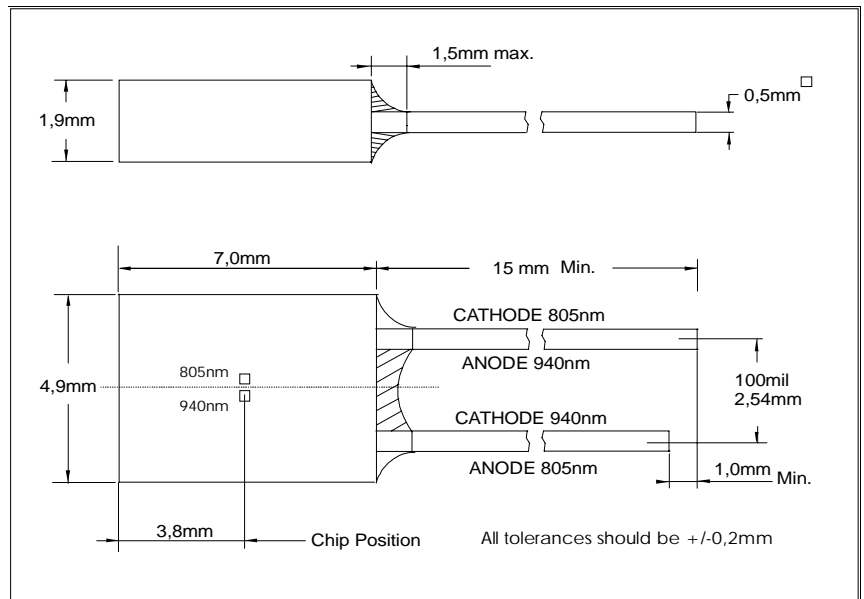


## DualWavelength LED

## 805nm/940nm FQP4803

### Features

- \* Standard design LED for special purpose  
Based on double hetero structure of GaAlAs
- \* 1.LED=805nm / 2. LED = 940nm  
High-selected wavelength
- \* Water-clear package style without stand-off
- \* Two lead lateral case antiparallel connected  
Chips
- \* Application :                   Spectral analysis  
  IR/RED-Flash-Lights  
  Medical Instruments  
  SPO2-Instruments



### Electrical and optical characteristics and absolute maximum ratings ( Ta=25°C unless otherwise noted )

Symbol	Parameter	MIN	Typ	MAX	Unit	Test conditions
I <sub>F</sub>	DC Forward current			100	mA	1. LED
I <sub>F</sub>	DC Forward current			100	mA	2. LED
I <sub>PEAK</sub>	Peak Forward current 805nm			750	mA	T <sub>p</sub> < 10μsec. ; T <sub>r</sub> = 1:100 ; R <sub>therm</sub> < 100 K/W
I <sub>PEAK</sub>	Peak Forward current 940nm			750	mA	T <sub>p</sub> < 10μsec. ; T <sub>r</sub> = 1:100 ; R <sub>therm</sub> < 100 K/W
V <sub>F</sub>	Forward Voltage 805nm	1,3	1,7	2,1	V	I <sub>F</sub> = 50mA 1.LED
V <sub>F</sub>	Forward Voltage 940nm	1,2	1,6	2	V	I <sub>F</sub> = 50mA 2.LED
V <sub>R</sub>	Reverse Voltage	5			V	I <sub>rev</sub> = 100μA 1.LED/ 2.LED
λ <sub>Peak</sub>	Peak Wavelength	800	805	810	nm	I <sub>F</sub> = 20mA 1.LED
λ <sub>Peak</sub>	Peak Wavelength	925	940	950	nm	I <sub>F</sub> = 20mA 2.LED
Δλ <sub>0,5</sub>	Bandwidth of half power	25	30		nm	I <sub>F</sub> = 50mA , both LED's
t <sub>f/r</sub>	Fall time / Rise time		20		ns	I <sub>F</sub> = 100mA 1.LED
t <sub>f/r</sub>	Fall time / Rise time		50		ns	I <sub>F</sub> = 100mA 2.LED
F <sub>E</sub>	Total Power Output	33	38		mW	I <sub>F</sub> = 100mA 1.LED
I <sub>E</sub>	Radiant Intensity		4		mW/sr	I <sub>F</sub> = 100mA 1.LED
F <sub>E</sub>	Total Power Output	23	28		mW	I <sub>F</sub> = 100mA 2.LED
I <sub>E</sub>	Radiant Intensity		2		mW/sr	I <sub>F</sub> = 100mA 2.LED
2Φ <sub>0,5</sub>	Emission Angel horizontal		100		deg.	Φ <sub>E</sub> / I <sub>v</sub> = 50%; I <sub>F</sub> = 20mA
2Φ <sub>0,5</sub>	Emission Angel vertical		100		deg.	Φ <sub>E</sub> / I <sub>v</sub> = 50%; I <sub>F</sub> = 20mA
TK <sub>VF</sub>	Temp.Coeff. of Forward Voltage		- 2		mV/K	
TK <sub>F</sub>	Temp.Coeff. of Radiant Power		- 0,4		%/K	
T <sub>Operating</sub>	Operating Temperature	- 25		75	°C	
T <sub>Storage</sub>	Storage Temperature	- 25		100	°C	
T <sub>Soldering</sub>	Soldering Temperature			260	°C	3mm from case @ 5 sec., iron soldering
Θ <sub>j-PIN</sub>	Thermal Resistance		450		K/W	
P <sub>tot</sub>	Total Power Dissipation			230	mW	derate above 45°C 5mW/K

Order Informations :

FQP4803                   Bulk

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