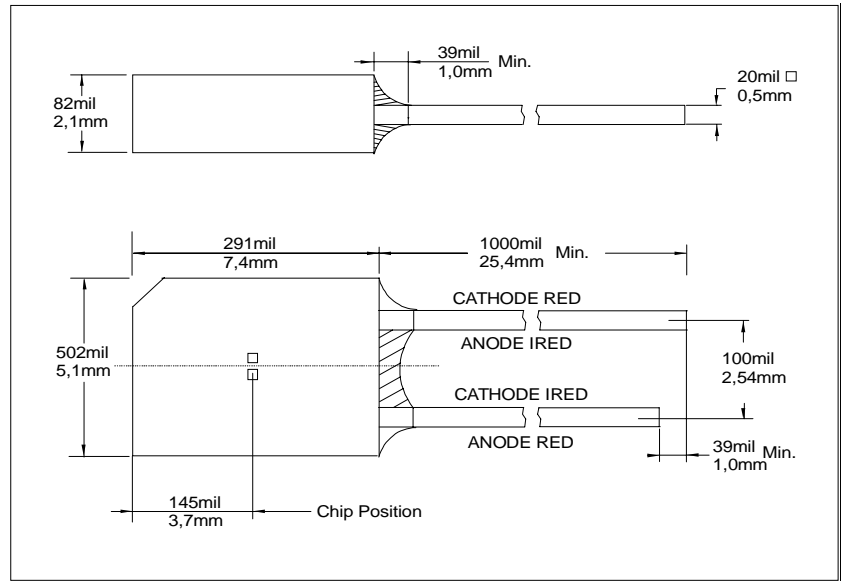


## DualWavelength LED

**870nm/658nm FQP4802**

### Features

- \* Standard design LED for special purpose  
Based on double hetero structure of GaAlAs
- \* 1.LED=870nm / 2. LED = 658nm  
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			30	mA	2. LED
I <sub>PEAK</sub>	Peak Forward current 1. LED			1500	mA	T <sub>p</sub> < 10µsec. ; T=1:100 ; R <sub>therm</sub> < 100 K/W
I <sub>PEAK</sub>	Peak Forward current 2. LED			250	mA	T <sub>p</sub> < 10µsec. ; T=1:100 ; R <sub>therm</sub> < 100 K/W
V <sub>F</sub>	Forward Voltage	1,3	1,7	2,1	V	IF = 50mA 1.LED
V <sub>F</sub>	Forward Voltage	2,1	2,25	2,3	V	IF = 20mA 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	860	870	890	nm	IF = 20mA 1.LED
λ <sub>Peak</sub>	Peak Wavelength	657	658	662	nm	IF = 20mA 2.LED
Δλ <sub>0,5</sub>	Bandwidth of half power	25	30		nm	IF = 50mA , both LED's
t <sub>f/r</sub>	Fall time / Rise time		20		ns	IF = 100mA 1.LED
t <sub>f/r</sub>	Fall time / Rise time		500		ns	IF = 100mA 2.LED
F <sub>E</sub>	Total Power Output	18	20		mW	IF = 50mA 1.LED
I <sub>E</sub>	Radiant Intensity				mW/sr	IF = 50mA 1.LED
F <sub>E</sub>	Total Power Output	1,6	2,1		mW	IF = 20mA 2.LED
I <sub>v</sub>	Luminous intensity	20	28		mcd	IF = 20mA 2.LED
2Φ <sub>0,5</sub>	Emission Angel horizontal		90		deg.	Φ <sub>E</sub> / I <sub>v</sub> = 50%; IF=20mA
2Φ <sub>0,5</sub>	Emission Angel vertical		90		deg.	Φ <sub>E</sub> / I <sub>v</sub> = 50%; IF=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		85	°C	
T <sub>Storage</sub>	Storage Temperature	- 25		85	°C	
T <sub>Soldering</sub>	Soldering Temperature			260	°C	2mm from case @ 5 sec.
Θ <sub>j-PIN</sub>	Thermal Resistance		450		K/W	
P <sub>tot</sub>	Total Power Dissipation			230	mW	derate above 45°C 2,5mW/K

### Order Informations :

Asked us for : FQP4801 Bulk  
FQP4801TR Taped on Reel / 1000 pcs. standard reel

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.

# DualWavelength LED

# 870nm/658nm FQP4802

