

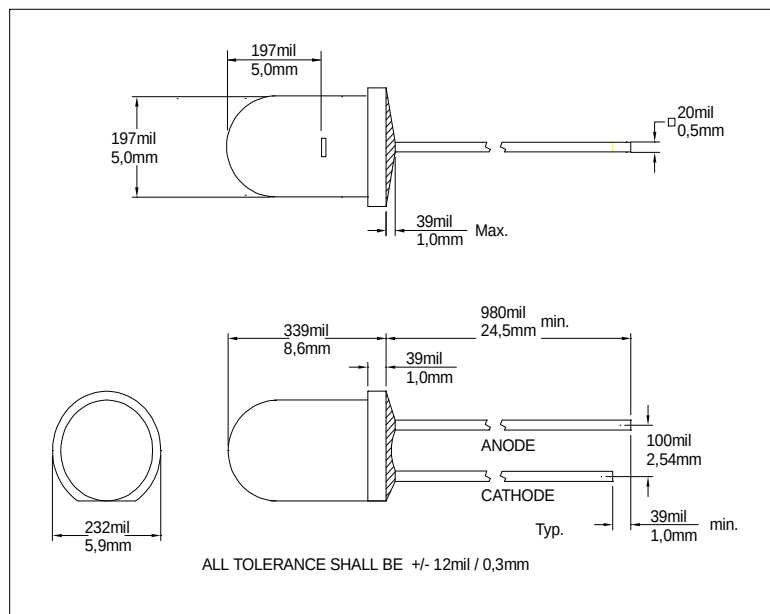
IR-LED

875nm

FQR55502ADA

Features

- * Standard design LED for general purpose
Based on double hetero structure of GaAlAs
- * Special construction with internal Diffusor
- * Fast switching time : typical <20ns
- * High cut-off frequency of >20Mhz @-3dB
- * High power for T1 3/4 case with 17° full angle
- * Water-clear package style without stand-off
- * Application : Open-Air communication / IrDa
IR-Flash-Lights
Medical instruments
Light interrupter and switches



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

Symbol	Parameter	MIN	Typ	MAX	Unit	Test conditions
I _F	DC Forward current			100	mA	
I _{PEAK}	Peak Forward current			1500	mA	Tp< 10μsec. ; T=1:100 ; Rtherm < 100 K/W
V _F	Forward Voltage BIN A	1,3		1,5	V	IF = 150mA Tp=1ms
V _F	Forward Voltage BIN B	1,5		1,7	V	IF = 150mA Tp=1ms
V _F	Forward Voltage BIN C	1,7		1,9	V	IF = 150mA Tp=1ms
V _R	Reverse Voltage	5			V	Irev = 100μA
λ _{Peak}	Peak Wavelength	860	870	885	nm	IF = 50mA
Δλ _{0,5}	Bandwidth of half power	25	30		nm	IF = 50mA
t _f	Fall time		20		ns	IF = 100mA
t _r	Rise time		20		ns	IF = 100mA
P _E	Total Power Output	30	32		mW	IF = 100mA
I _E	Radiant Intensity	220		280	mW/sr	IF = 100mA
A	Chip size		0,13		mm²	Chip size : 360μmX360μm
2Φ _{0,5}	Emission Angel	14	17	22	deg.	Φ _E = 50%
TK _{VF}	Temp.Coeff. of Forward Voltage		- 2		mV/K	
TK _P	Temp.Coeff. of Radiant Power		- 0,4		%/K	
T _{Operating}	Operating Temperature	- 25		85	°C	
T _{Storage}	Storage Temperature	- 25		85	°C	
T _{Soldering}	Soldering Temperature			260	°C	2mm from case @5 sec.
Θ _{j-PIN}	Thermal Resistance		450		K/W	
P _{tot}	Total Power Dissipation			230	mW	derate above 45°C 2,5mW/K

Order Informations :

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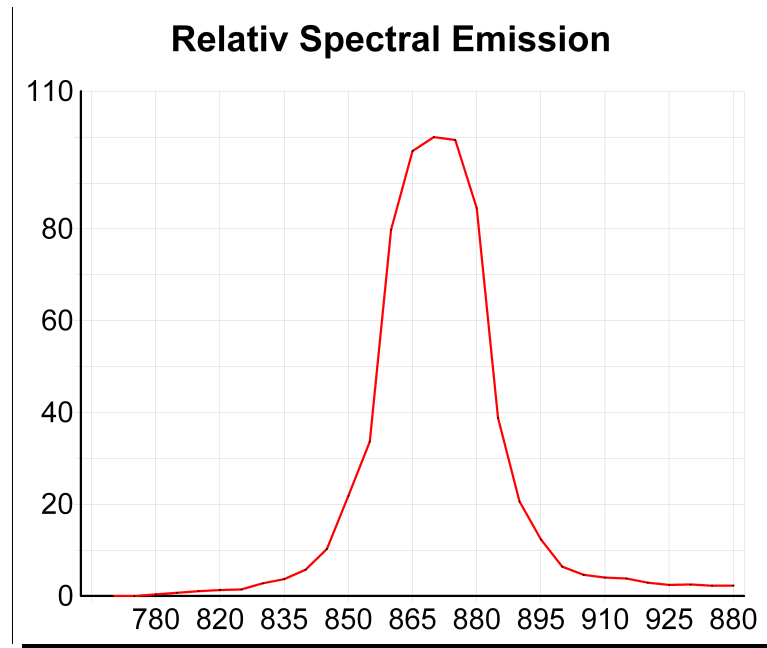
Bulk (1000 pcs./bag)

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.

IR-LED

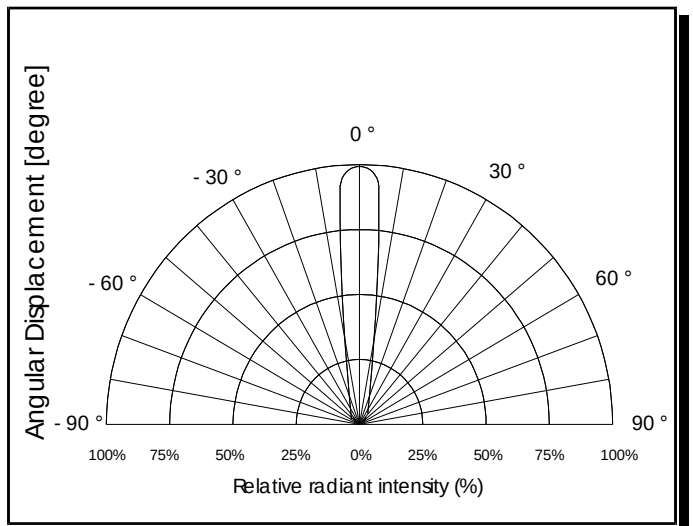
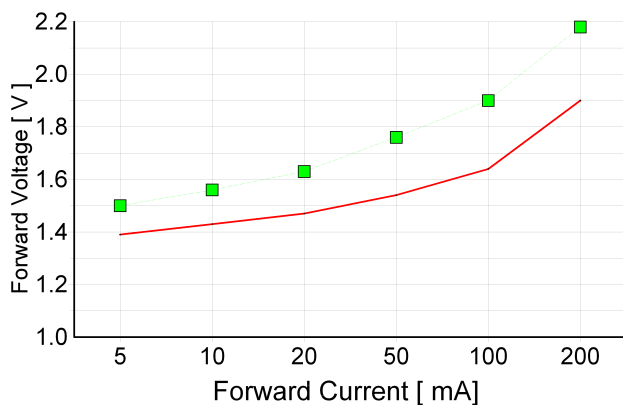
875nm

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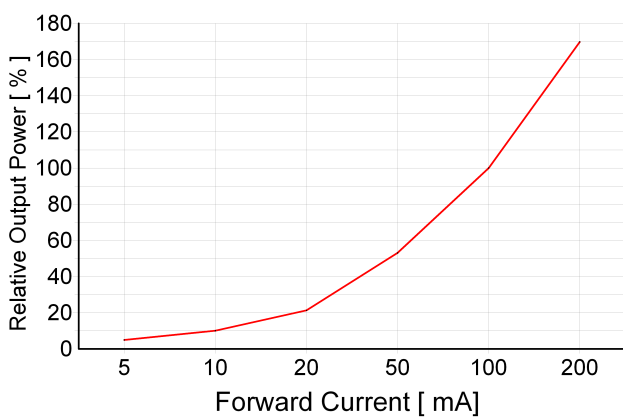


Forward Voltage

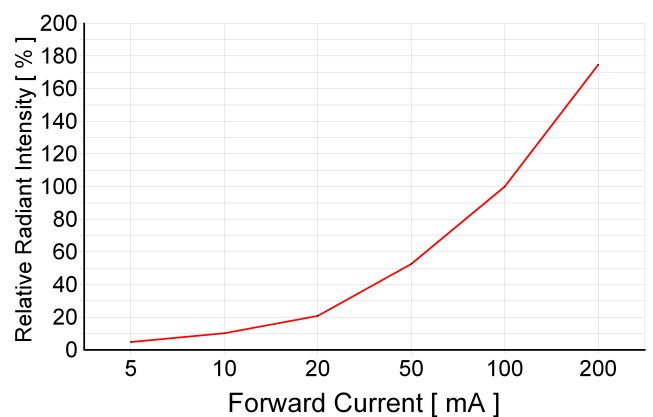
$V_f = f(I_f)$ typ.



Relative Output Power (typ.)



Relative Radiant Intensity (typ.)



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