

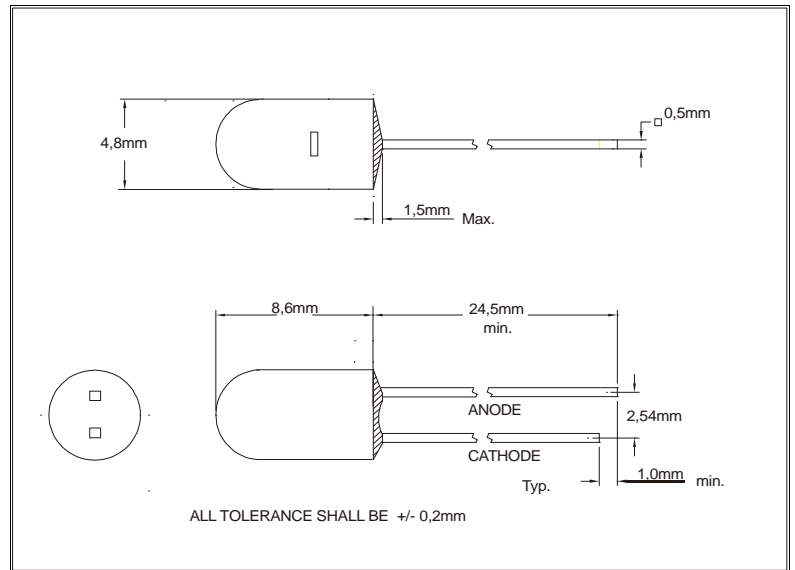
Infrared LED

870nm

FQR35553ADA

Features

- * Standard design LED for general purpose
Based on double hetero structure of GaAIAs
- * Fast switching time : typical <25ns
- * High power for 4,8mm case with 15° full angle
- * Water-clear package style without stand-off
- * Cylindrical 4.8mm case
- * Spectral and mechanical matched to FSR38XX - serie Phototransistor
- * 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	T _p < 10µsec. ; T=1:100 ; R _{therm} < 100 K/W
V _F	Forward Voltage	1,3	1,5	2,1	V	I _F = 100mA
V _R	Reverse Voltage	5			V	I _{rev} = 100µA
λ _{Peak}	Peak Wavelength	860	870	885	nm	I _F = 50mA
Δλ _{0,5}	Bandwidth of half power	25	30		nm	I _F = 50mA
t _f	Fall time		25		ns	I _F = 100mA
t _r	Rise time		25		ns	I _F = 100mA
Φ _E	Total Power Output	40	50		mW	I _F = 100mA
I _E	Radiant Intensity	200	250		mW/sr	I _F = 100mA
A	Chip size		0,13		mm ²	Chip size : 360µmX360µm
2Φ _{0,5}	Emission Angel	12	15	20	deg.	Φ _E = 50%
TK _{VF}	Temp.Coeff. of Forward Voltage		- 2		mV/K	
TK _F	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 :

FQR35553ADA

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.