

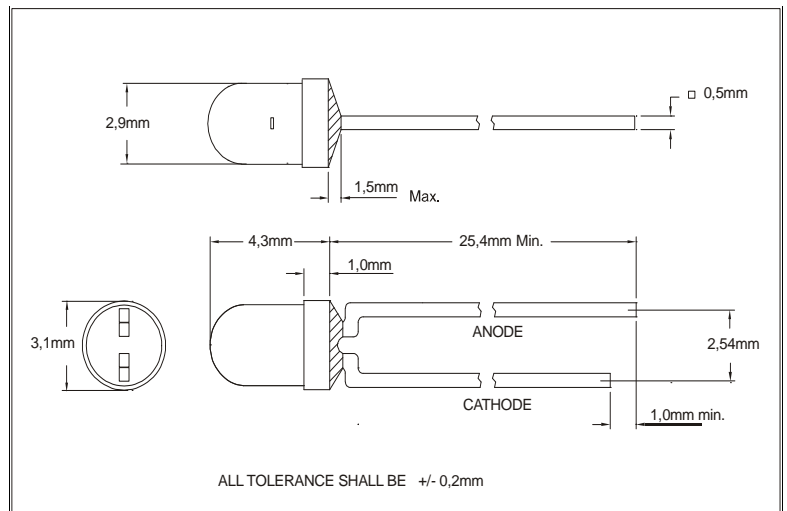
IRED - Edged Corner Bonded

870nm

FQT55559AGA

Features

- * Standard design LED for general purpose
Based on double hetero structure of GaAlAs
Edged Corner bonded chip
- * Fast switching time : typical <20ns
- * High cut-off frequency of >20Mhz @-3dB
- * High power for T1 case with 32°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 FQT55559-AX	1,30		1,70	V	IF = 150mA @ Tp=1ms
V _F	Forward Voltage FQT55559-BX	1,71		1,75	V	IF = 150mA @ Tp=1ms
V _F	Forward Voltage FQT55559-CX	1,76		1,80	V	IF = 150mA @ Tp=1ms
V _F	Forward Voltage FQT55559-DX	1,81		2,10	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
Φ _E	Total Power Output	32	39		mW	IF = 100mA
I _E	Radiant Intensity	100	120		mW/sr	IF = 100mA
A	Chip size		0,13		mm ²	Chip size : 360µmX360µm
2Φ _{0,5}	Emission Angel	30		35	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	3mm from case @5 sec.
Θ _{j-PIN}	Thermal Resistance		450		K/W	
P _{tot}	Total Power Dissipation			210	mW	derate above 45°C 3,5mW/K

Order Informations :

FQT55559AGA-XX-BU
FQT55559AGA-XX-TA

Bulk (1000pcs.)
Tape&Reel Ammpack (3000pcs)

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.