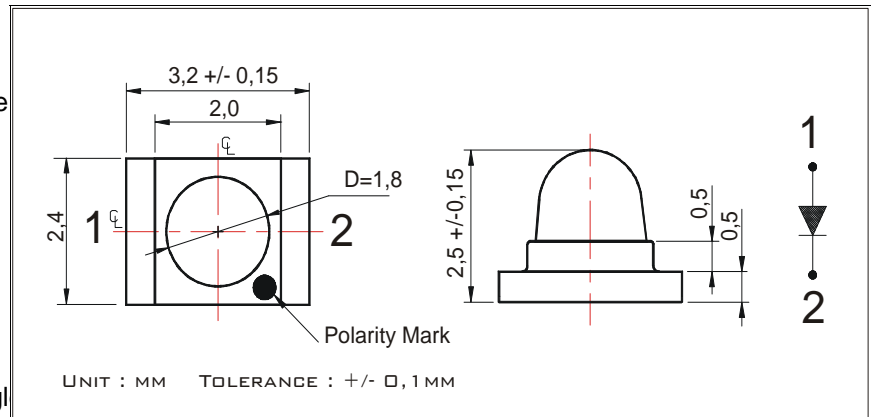


SMD- IRED**960nm****FQM5613ADA****Features**

- * Standard design LED for general purpose
Based on GaAlAs
- * Fast switching time : typical <40ns
- * mechanical matched with photodiodes
CSM3851OT40 /FSM3851
- * High power for SMD case with 15° full angl
- * Water-clear package style
- * 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			800	mA	$T_p < 10\mu\text{sec.}$; $T=1:100$; $R_{\text{therm}} < 100 \text{ K/W}$
V_F	Forward Voltage	1,50		2,10	V	$I_F = 150\text{mA}$ @ $T_p=1\text{ms}$
V_R	Reverse Voltage	5			V	$I_{\text{rev}} = 100\mu\text{A}$
λ_{Peak}	Peak Wavelength	950	960	970	nm	$I_F = 20\text{mA}$
$\Delta\lambda_{0,5}$	Bandwidth of half power	25	30		nm	$I_F = 20\text{mA}$
t_f	Fall time		30	40	ns	$I_F = 80\text{mA}$
t_r	Rise time		30	40	ns	$I_F = 80\text{mA}$
Φ_E	Total Power Output	22			mW	$I_F = 100\text{mA}$
I_E	Radiant Intensity	30			mW/sr	$I_F = 100\text{mA}$
A	Chip size		0,13		mm ²	Chip size : 360 μm X360 μm
$2\Phi_{0,5}$	Emission Angel	10	15	17	deg.	$\Phi_E = 50\%$
TK_{VF}	Temp.Coeff. of Forward Voltage		- 2		mV/K	
TK_F	Temp.Coeff. of Radiant Power		- 0,4		%/K	
$T_{\text{Operating}}$	Operating Temperature	- 25		85	°C	
T_{Storage}	Storage Temperature	- 25		85	°C	
$T_{\text{Soldering}}$	Soldering Temperature			235	°C	@5 sec.
Θ_{j-PIN}	Thermal Resistance		450		K/W	
P_{tot}	Total Power Dissipation			130	mW	derate above 45°C 3mW/K

Order Informations :

FQM5613ADA-TR

Tape&Reel (1500 pcs./Reel; lens top in the tape)

Tape : Cathode is undepend on the polarity mark on the side of transportation lane

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.