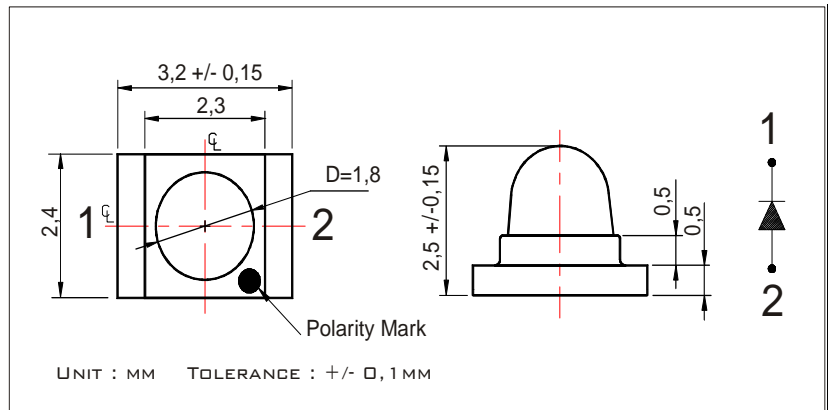


SMD- IRED**855nm****FQM5593BDB****Features**

- * Standard design LED for general purpose
- * Fast switching time : typical <40ns
- * mechanical matched with photodiodes
FSM3821/FSM3822
FSM3851OT40, FSM3853 and FSM3855
- * High power for SMD case with 15° full angle
- * 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		60	80	mA	
I _{PEAK}	Peak Forward current			800	mA	T _p < 10μsec. ; T=1:100 ; R _{therm} < 100 K/W
V _F	Forward Voltage	1,30		1,75	V	I _F = 150mA @ T _p =1ms
V _R	Reverse Voltage	5			V	I _{rev} = 100μA
λ _{Peak}	Peak Wavelength	840	855	870	nm	I _F = 50mA
Δλ _{0,5}	Bandwidth of half power	25	30		nm	I _F = 50mA
t _f	Fall time		30	40	ns	I _F = 80mA
t _r	Rise time		30	40	ns	I _F = 80mA
Φ _E	Total Power Output	45	55		mW	I _F = 80mA
I _E	Radiant Intensity	100	145		mW/sr	I _F = 80mA
A	Chip size		0,13		mm ²	Chip size : 360μmX360μm
2Φ _{0,5}	Emission Angel	10	15	17	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			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 :

FQM5593BDB-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