Low-Current IR-LED 855nm FQR56593BDP

Features

* Standard design LED for general purpose
  Based on double hetero structure of GaAlAs

* Special construction with internal Diffusor

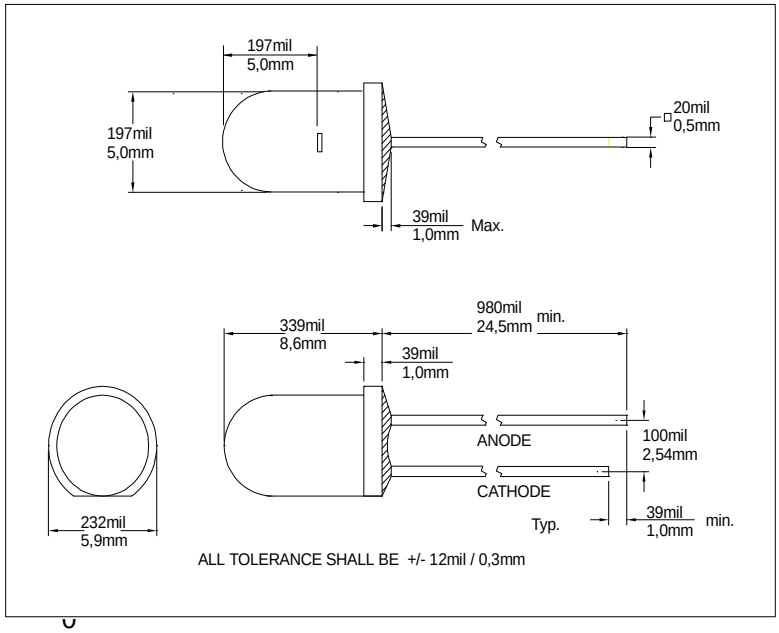
* Fast switching time : typical <20ns

* 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℃ unless otherwise noted)

Symbol	Parameter	MIN	Typ	MAX	Unit	Test conditions
I_F	DC Forward current		50	70	mA	
I_{PEAK}	Peak Forward current			250	mA	Tp< 10µsec. ; T=1:100 ; Rtherm < 100 K/W
V_F	Forward Voltage	1,35	1,6	2,1	V	IF = 50mA
V_F	Forward Voltage	1,1	1,3	1,7	V	IF = 3mA
V_R	Reverse Voltage	5			V	Irev = 100µA
λ_{Peak}	Peak Wavelength	840	855	870	nm	IF = 50mA
$\Delta\lambda_{0,5}$	Bandwidth of half power	25	30		nm	IF = 50mA
t_f	Fall time		20		ns	IF = 50mA
t_r	Rise time		20		ns	IF = 50mA
Φ_E	Total Power Output	24	32		mW	IF = 50mA
I_E	Radiant Intensity	50	75		mW/sr	IF = 50mA
I_E	Radiant Intensity	2	3,5		mW/sr	IF = 3mA
A	Chip size		0,07		mm²	Chip size : 260µmX260µm
$2\Phi_{0,5}$	Emission Angel	14	17	22	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	℃	
$T_{Storage}$	Storage Temperature	- 25		85	℃	
$T_{Soldering}$	Soldering Temperature			260	℃	2mm from case @5 sec.
$\Theta_{j\text{-}PIN}$	Thermal Resistance		450		K/W	
P_{tot}	Total Power Dissipation			230	mW	derate above 45℃ 2,5mW/K

Order Informations : FQR56593BDP Bulk (1000 pcs./bag)