

LED 650nm 50MBit/s

6 Maximum Ratings

Stresses beyond those listed under 'Maximum Ratings' may cause permanent damage to the LED. Below listed values are stress limits only and functional operation of the LED at these conditions is not recommended. Exposure to maximum rating conditions for extended periods may affect the LED reliability.

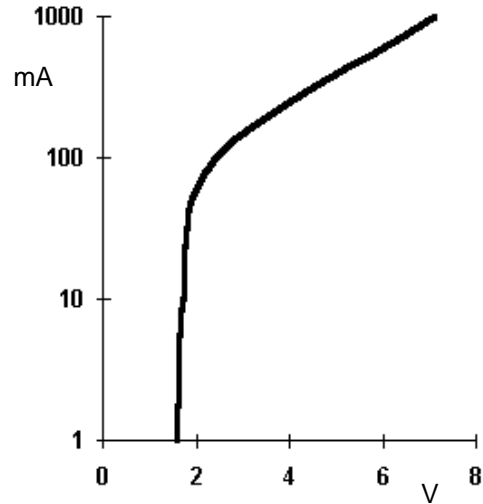
Parameter	Value	Unit
Operating Temperature Range	-40 ... +80	°C
Storage Temperature Range	-55 ... +100	°C
Junction Temperature	100	°C
Lead Soldering Temperature 2mm from case t ≤ 5s	260	°C
Reverse Voltage	3	V
Continuous Forward Current	50	mA
Surge Current t ≤ 10µs, D=0	1	A
Power Dissipation	120	mW
Thermal Resistance	450	K/W

7 Technical Data

Parameter	Value	Unit
Wavelength λ	650	nm
Spectral Bandwidth Δλ	25	nm
Switching Times (I _F =50mA) t _R t _F	15 (<17) 18 (<20)	ns ns
Capacitance (V _R =0V)	30	pF
Forward Voltage V _F (I _F =50mA)	2,1 (<2,8)	V
Output Power P _{OUT} Coupled into 1mm Plastic Faser (I _F =10mA)	150 (>100)	µW
Temperature Coefficient P _{OUT}	-0,4	%/K
Temperature Coefficient V _F	-3	mV/K
Temperature Coefficient λ	0,16	nm/K

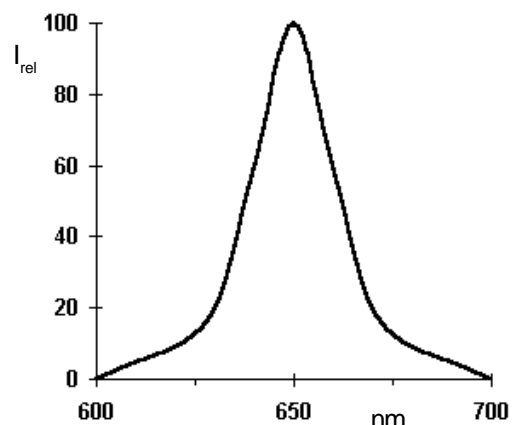
8 Characteristics

Forward Current I_F=f(V_F)
Single pulse t = 20µs



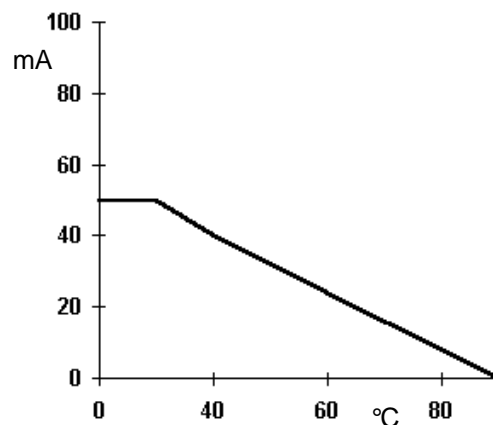
Pic. 3

Relative Spectral emission I_{REL}=f(λ)



Pic. 4

Maximum Forward Current I_F=f(T_A)



Pic. 5