

CTL0805FPD1T DATASHEET

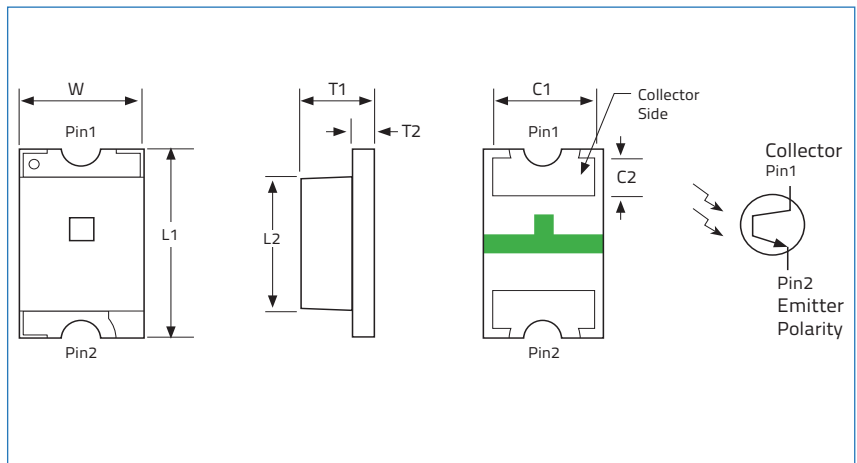
Chip Type LED, 0805, Flat Lens, Phototransistor



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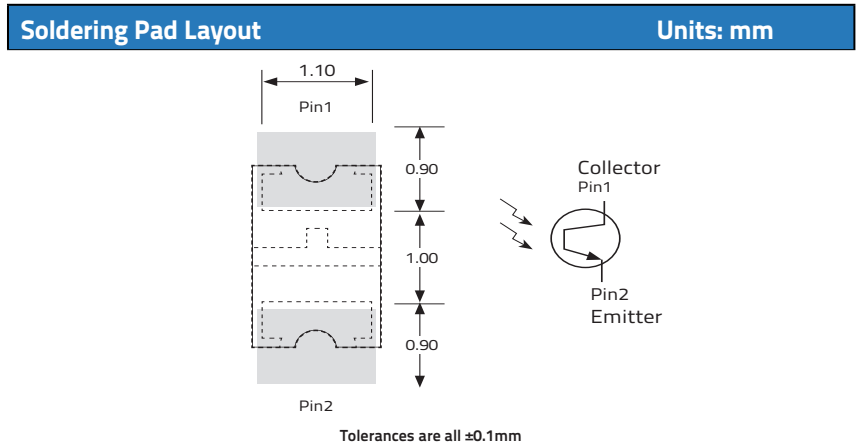
Part Number	Size	Emitting Color	Lens-Color	Rang of Spectral Bandwidth nm λD	Wavelength of Peak Sensitivity nm λP	Viewing Angle (2θ 1/2)
CTL0805FPD1T	0805	Phototransistor	Black	700 min 1100 max	940	140°

Electrical & Optical Specifications ($T_A=25^\circ C$)		PD1	Unit
Collector-Emitter Break-down Voltage ($I_C=100\mu A$)	BV_{CEO}	35	V
Emitter-Collector Break-down Voltage ($I_E=100\mu A$)	BV_{ECO}	5	V
On State Collector Current (max)	$I_{C(ON)}$	2.0	mA
Wavelength of Peak Sensitivity	λP	940	nm
Collector Dark Current ($V_{CE}=20V, E_E=0mW/cm^2$)	I_{CEO}	100	nA
Collector-Emitter Saturation Voltage ($I_C=2mA, E_E=1mW/cm^2$)	$V_{CE(sat)}$	0.4	V
Rise Time ($V_{CE}=5V, I_C=1mA, R_L=1000\Omega$)	t_r	15	μS
Fall Time ($V_{CE}=5V, I_C=1mA, R_L=1000\Omega$)	t_f	15	μS



Dimensions		Units: Inches (mm)	
L_1	L_2	T_1	T_2
0.079±0.004 (2.0±0.1)	0.055±0.004 (1.4±0.1)	0.0314±0.004 (0.8±0.1)	0.011±0.004 (0.28±0.1)
W	C2	C2	
0.051±0.004 (1.30±0.1)	0.0433±0.004 (1.1±0.1)	0.016±0.004 (0.4±0.1)	

Absolute Maximum Ratings ($T_A=25^\circ C$)		PD1	Unit
Collector Current	I_C	20	mA
Total Power Dissipation	P_{to}	150	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	T_{stg}	-40 ~ +100	



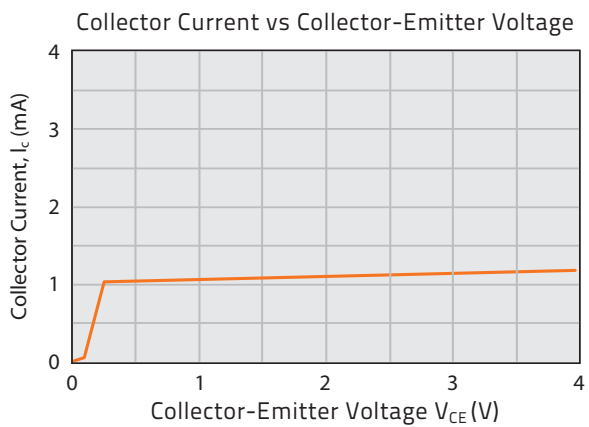
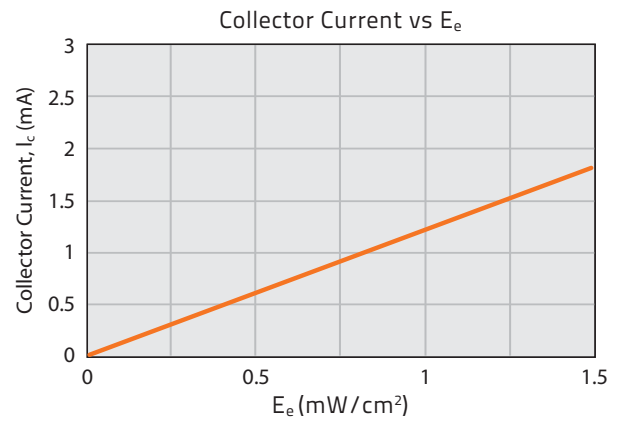
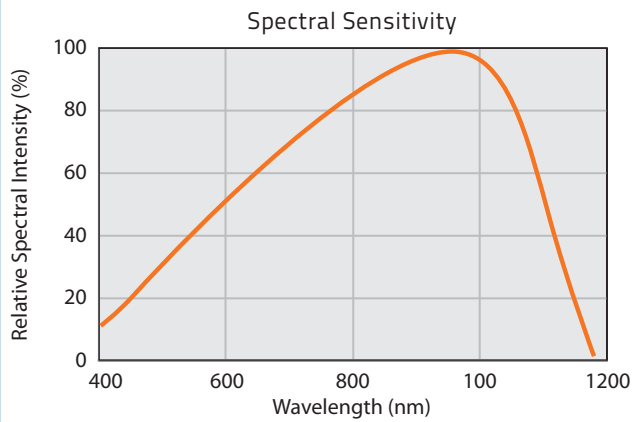
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Graphs



Environmental information

RoHS Status	6 of 6 Compliant
REACH Status	Compliant
Halogen Status	Halogen Free
Conflict Mineral Status	Conflict Mineral Free
Moisture Sensitivity Level (MSL)	3

Reflow profile

Max Reflow Temperature	260°C
Number of Reflow Cycles	2
Time at Max Reflow Temperature	10 seconds

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Label Example

Item: CTL0805FPD1T

Chip Type LED,0805,Flat Lens,Phototransistor

Qty: 4000

D/C: 1018

Lot: 20160502001

BIN: B1

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YOUR SINGLE SOURCE FOR SURFACE MOUNT PASSIVES

Codes:

BIN: Radiant Intensity

Radiant Intensity Classification (BIN Code)

BIN Code	I_e	
	Min.	Max.
B1	0.1	2.0

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Reel Specifications		Units: mm		
M	C	F	E	G
178±1.50	56.0±1.0	12.0±1.0	60.0±1.0	9.0±1.0

Packaging Specifications	
Reel Size:	7"
Quantity per Reel :	4,000

Storage Specifications
1. Storage temperature and RH: 5°C~35°C, RH60%
2. Once the package is opened, the LEDs should be used within a week. Otherwise, they should be kept in a moisture proof bag with desiccant. We suggest that you use this product within one year from date code.
3. If opened for more than one week in an atmosphere of 5°C~35°C, RH60%. The parts should be heat treated at 60°C±5°C for 15 hours.

Tape Specifications		Units: mm		
T	W	A	B	F
0.95±0.5	8.0±0.3	2.30±0.5	1.45±0.1	3.5±0.2
E	H	J	D	G
1.75±0.1	4.0±0.2	2.0±0.1	1.5±0.1	4.0±0.2