PRODUCT SPECIFICATION

Part Number

PTDC12031R02-01

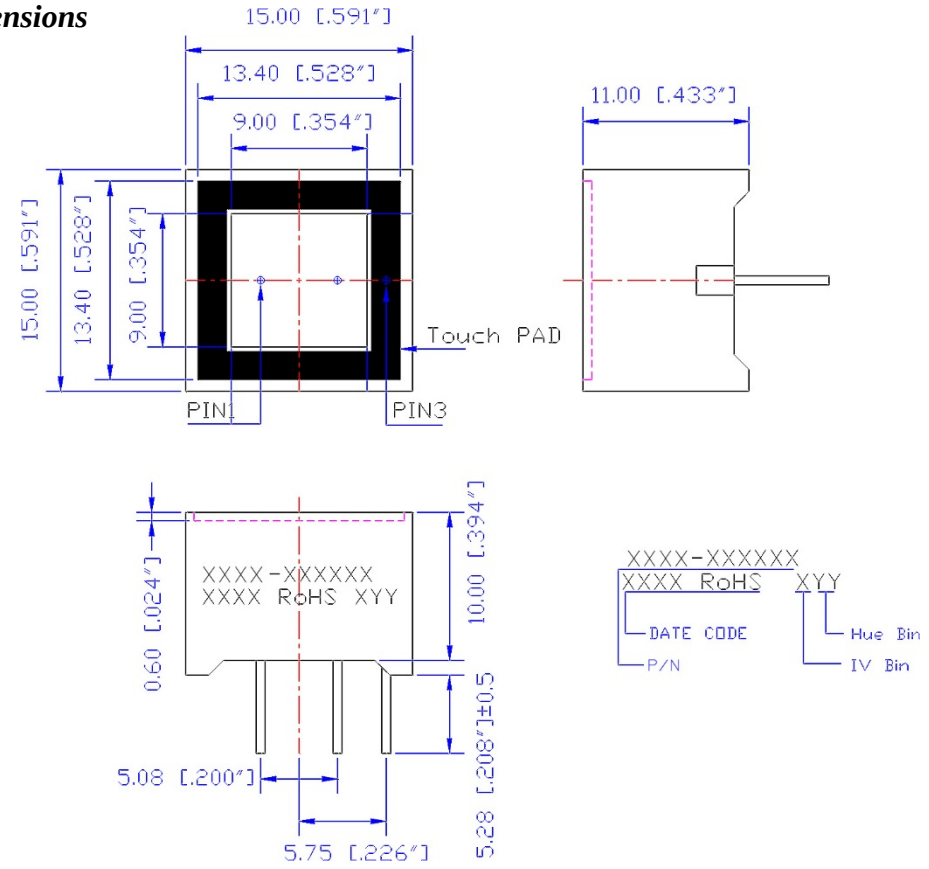
Details

- Touch LED Display
- 15 x 15 x 11mm
- Emitting Color: Orange-Red
- AlInGaP dice used

Features

- Case mold type
- White surface with white segments
- Low power consumption
- Easy mounting on PC board or socket
- RoHS Compliant

Mechanical Dimensions



Notes:
1. Dimensions in millimeters [inch] and tolerance is ±0.25 [.01] unless otherwise noted
2. Bending≤Length*1%.
3. All pins are Φ0.60 [.024
4. Specifications subject to change without notice

Device Selection Guide

Model Number	Chip	
	Material	**Emitting Color**
PDTC12031R02-01	AlInGaP	Orange-Red

Absolute Maximum Ratings at Ta=25℃

Parameter	Symbol	Rating	Unit
Power Dissipation per Dice	PAD	70	mW
Derating Liner from 25℃ per Dice	--	0.33	mA/℃
Continuous Forward Current per Dice	IAF	25	mA
Peak Current per Dice (duty cycle 1/10, 1 KHz)	IPF	90	mA
Reverse Voltage per Dice	VR	5	V
Operating Temperature	Topr	-35~+85	℃
Storage Temperature	Tstg	-35~+85	℃
Soldering Conditions	1/16 inch below seating plane for 3 seconds at 260℃. Or temperature of unit (during assembly) not over max. temperature rating above		

Electrical and Optical Characteristics at Ta=25℃

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage	VF	--	2.0	2.8	V	IF=20mA
Luminous Intensity	Φv	44	78	--	mcd	
Peak Wavelength	λP	--	632	--	nm	
Dominant Wavelength	λD	--	625	--	nm	
Spectrum Radiation Bandwidth	Δλ	--	20	--	nm	
Reverse Current	IR	--	--	100	μA	VR=5V
Luminous Intensity Matching Ratio	IV-m	--	--	2:1	--	IF=10mA

Luminous General Iv Bin Grade (IF=10mA)

N	P	Q
44.096	70.555	112.889
I	I	I
70.554	112.888	180.622

Remark： Remark： Unit=mcd

*Tolerance: *Tolerance: ±20%

Typical Electrical / Optical Characteristic Curves

- *Ta = 25℃ Unless Otherwise Noted*

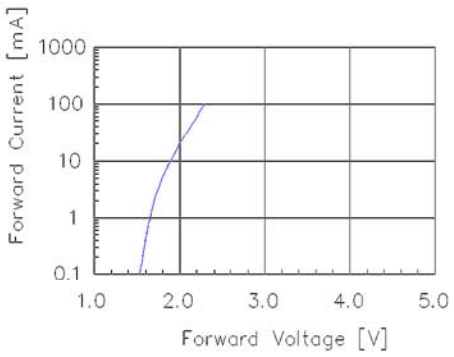


Fig 1. Forward Current vs. Forward Voltage

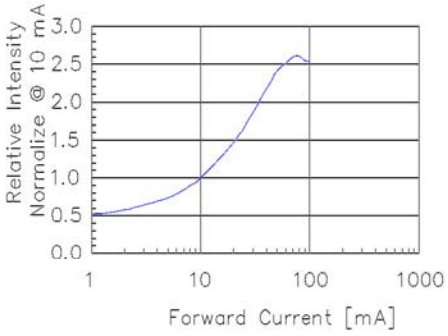


Fig 2. Relative Intensity vs. Forward Current

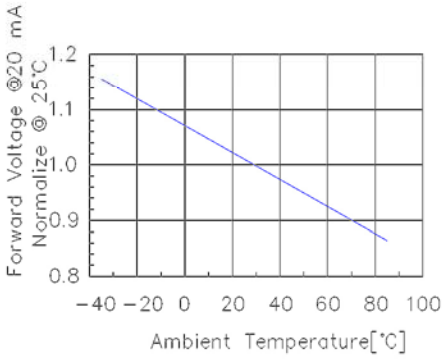


Fig 3. Forward Voltage vs. Temperature

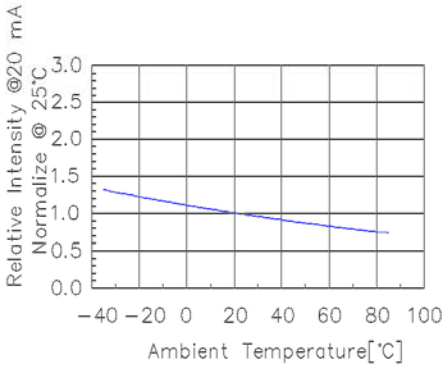


Fig 4. Relative Intensity vs. Temperature

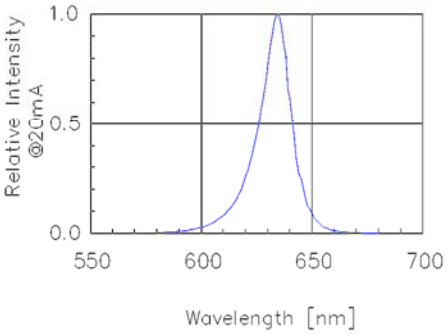
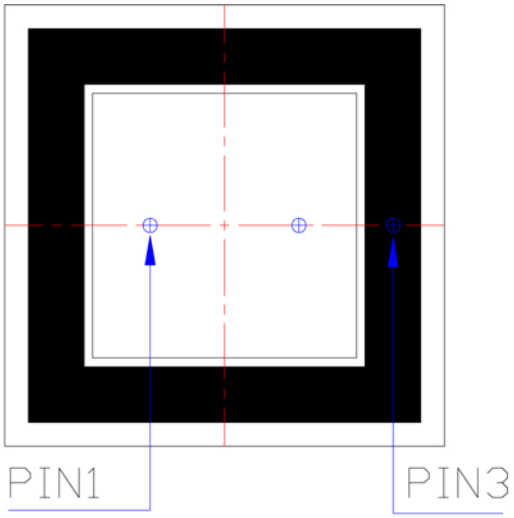
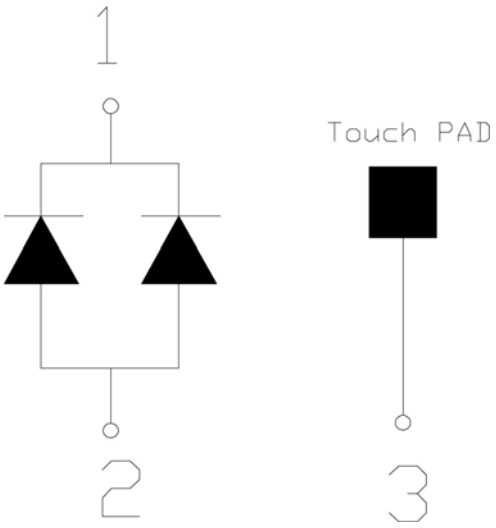


Fig 5. Relative Intensity vs. Wavelength

All Light-On Segments Feature & Pin Position

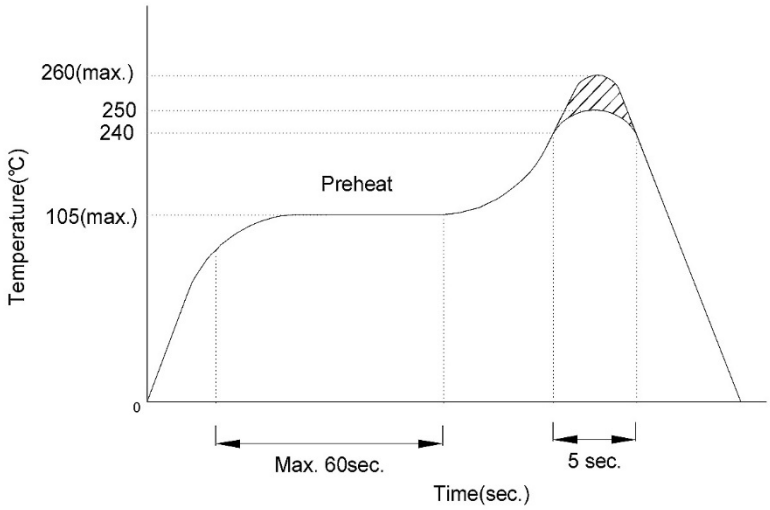


Internal Circuit Diagram



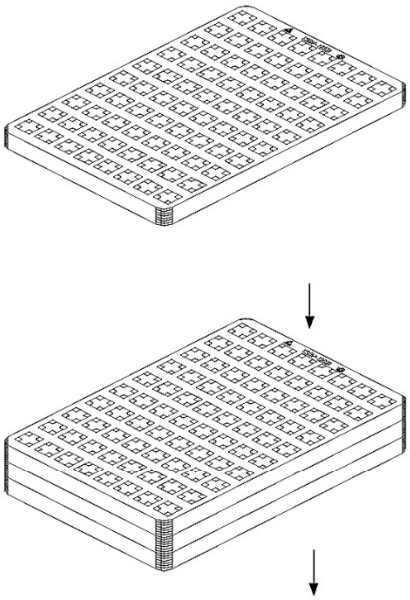
Precautions for Use

1. Recommended soldering conditions
    a. Wave soldering
        i. Basic SPEC. is ≦5sec. When 260℃. If temperature is higher, time should be shorter (+10℃→ -1sec.).

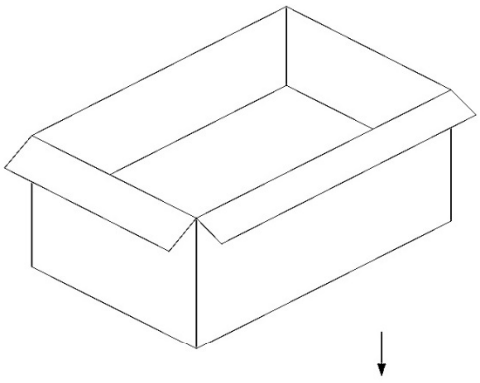


2. Soldering Iron
    a. Power dissipation of iron should be smaller than 15W, and temperature should be controllable. Soldering temperature should be under 230℃, time ≦3sec.

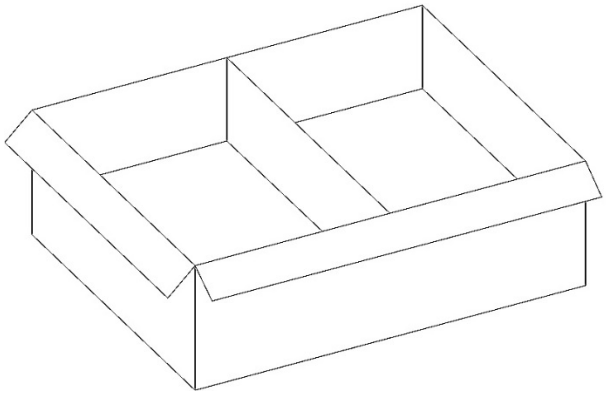
Packaging Dimensions



1 Tray From Box = 80 PCS
Tray Size:
L300 x W200 x H20mm



9 Trays Per Inner Box
Q'TY: 720 Pcs.
Box Size:
L300 x W205 x H240mm



2 Inner Boxes Per Carton.
Total Q'TY: 1440 Pcs
Carton Size:
L431 x W320 x H252mm

	Approved By	Checked By	Prepared By
Customer Approval Signatures			

Record Of Revisions			
Rev.	**Comments**	**Page**	**Date**
0	Released Spec	--	04/24/14