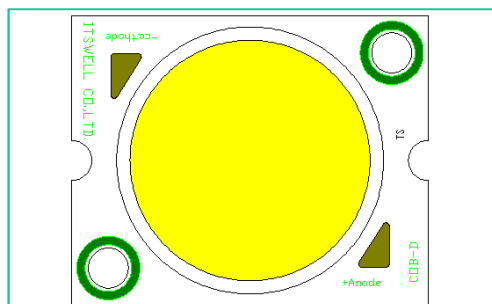


# Preliminary



**Product : Multi Chip Array LED (10W)**

**Part No. : IWC-B12R2-P7-D5601**

**Date : 2012. 12. 10 Ver 0.1**

Proposed By	Checked By	Checked By	Checked By	Approval

**Comment**



Incheon Company :  
58B-4L, 626-3 Gojan-dong, Namdong-gu, Incheon 405-817 KOREA  
TEL:+82-32-813-1910, FAX:+82+32-822-9009  
URL: <http://www.itswell.com>,

## **Contents**

<b>1. Product Outline</b>	<b>.....</b>	<b>3</b>
<b>2. Outline Drawing and Dimension</b>	<b>.....</b>	<b>3</b>
<b>3. Absolute Maximum Rating</b>	<b>.....</b>	<b>4</b>
<b>4. Electrical &amp; Optical Characteristics</b>	<b>.....</b>	<b>4</b>
<b>5. Rank (Luminous Flux, Forward Voltage, Color Coordinates)</b>	<b>.....</b>	<b>5</b>
<b>6. Typical Characteristic Curve</b>	<b>.....</b>	<b>7</b>
<b>7. Dimension of Tray</b>	<b>.....</b>	<b>9</b>
<b>8. Packing Dimension</b>	<b>.....</b>	<b>10</b>
<b>9. Precaution in Use</b>	<b>.....</b>	<b>11</b>
<b>10. Reliability</b>	<b>.....</b>	<b>14</b>
<b>11. Part Name Description</b>	<b>.....</b>	<b>15</b>
<b>12. Laser Making Description</b>	<b>.....</b>	<b>15</b>
<b>13. Attention : Electric Static Discharge(ESD) Protection</b>	<b>.....</b>	<b>15</b>
<b>14. Revision History</b>	<b>.....</b>	<b>16</b>

# Multi Chip Array LED (12W)

## IWC-B12R2-P7-D5601



### 1. Product Outline

#### 1.1 Features

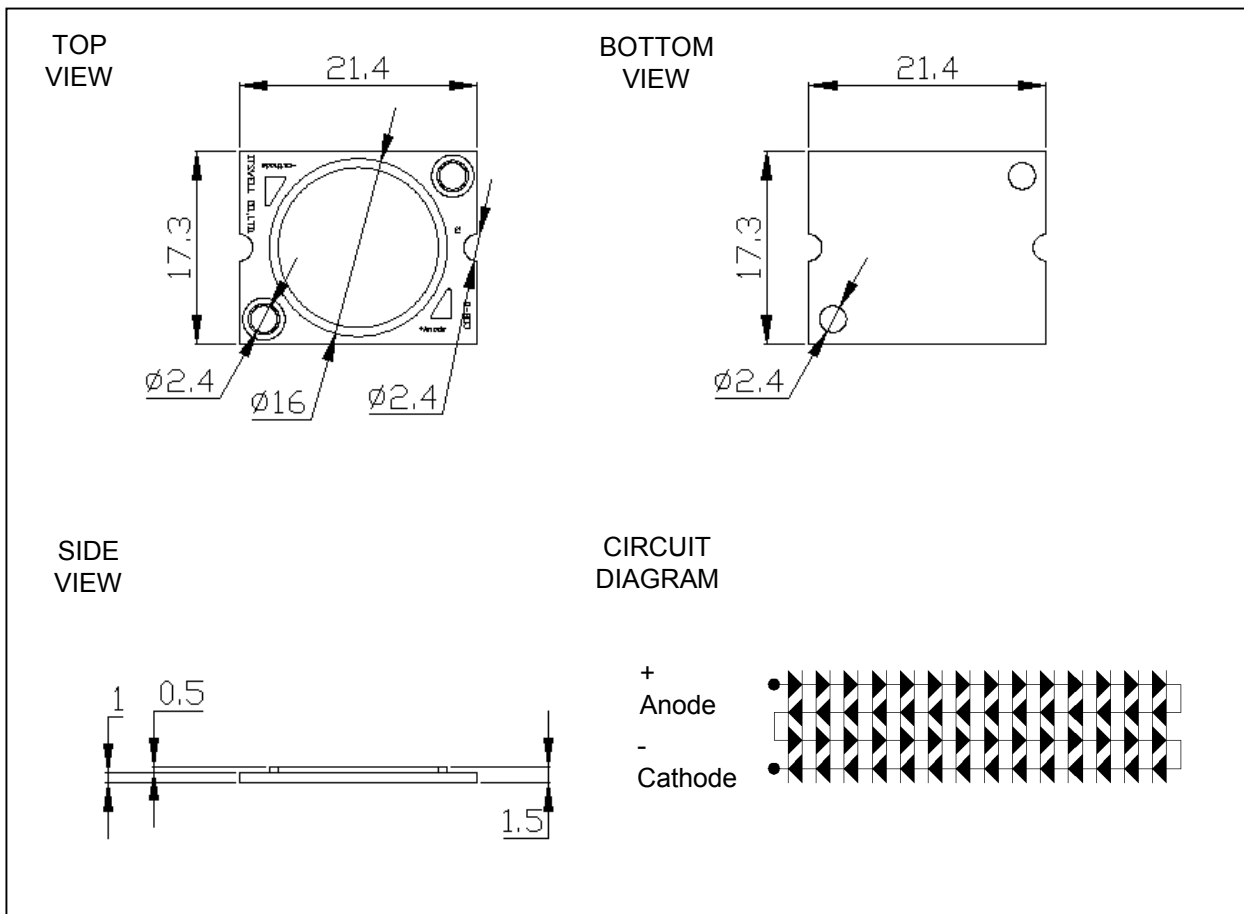
- High Power and High Efficiency Package
- Chip on Board Type Multi Chip Array
- Higher Energy Efficient than Incandescent, Halogen and Some Fluorescent Lamps
- Long Operating Life

#### 1.2 Applications

- General Lighting and Interior Lighting
- Indoor Lighting for Incandescent and Halogen Lamps
- Flood Lighting

### 2. Outline Drawing and Dimension

Unit : mm  
Tolerance :  $\pm 0.2$



#### Note

1. All dimensions are in millimeters
2. All dimensions without tolerances are for reference only

# Multi Chip Array LED (12W)

## IWC-B12R2-P7-D5601



### 3. Absolute Maximum Ratings ( Ta : 25 °C )

Parameter	Symbol	Value	Unit
Power Dissipation	$P_d$	16.2	W
Continuous Forward Current	$I_F$	90	mA
Peak Forward Current *1	$I_{FP}$	140	mA
Operating Temperature	$T_{opr}$	-30 ~ +85	°C
Storage Temperature	$T_{stg}$	-40 ~ +100	°C
Junction Temperature	$T_{jmax}$	120	°C
Thermal Resistance	$R_{th J-S}^{*2}$	0.75	K/W

\*1 Duty ratio = 1/10, Pulse width = 10ms

\*2 J = Junction S= Substrate

### 4. Electrical & Optical Characteristics ( Ta : 25 °C )

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit.
Forward Voltage	$V_F$	$I_F = 70mA$	160.0		180.0	V
Color Coordinates	CIE x CIE y		Refer to Color Coordinates Rank			
General Color Rendering Index	RA		75			
Luminous Flux*2	$\Phi_V$		800	-	1200	lm
View Angle*3	$2\theta_{1/2}$		-	120	-	deg.

\*2 Luminous Flux is measured with an integrating sphere and has an accuracy of 10%

\*3 Viewing angle is the angle until 50% of brightness measured from the front part of LED.