

# Round LED

## Warm Super White, 3mm

**multicomp** PRO

**RoHS  
Compliant**



### Specifications:

Dice Material	: InGaN
Emitted Colour	: White
Lens Colour	: Water clear
Chromaticity Coordinate	: X=0.3; Y=0.32
Viewing Angle	: 36°
Luminous Intensity (IV)	: 9,000mcd

### Absolute Maximum Ratings (T<sub>A</sub> = 25°C)

Reverse Voltage	5V
Reverse Current	10µA (V <sub>R</sub> = 5V)
Electrostatics Discharge (ESD)	200V
Operating Temperature Range	-40°C to +85°C
Storage Temperature Range	-40°C to +100°C
Lead Soldering Temperature Range 1.6mm (1/16 inch) from body	260°C for 5 Seconds

### Electrical/Optical Characteristics at T<sub>A</sub> = 25°C

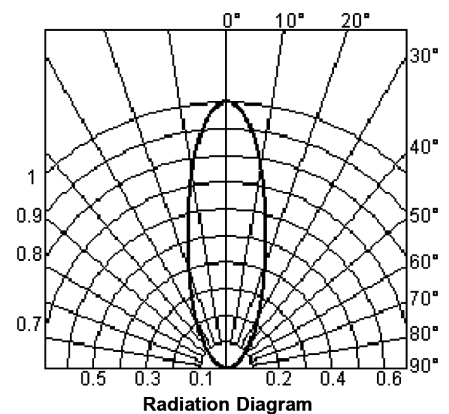
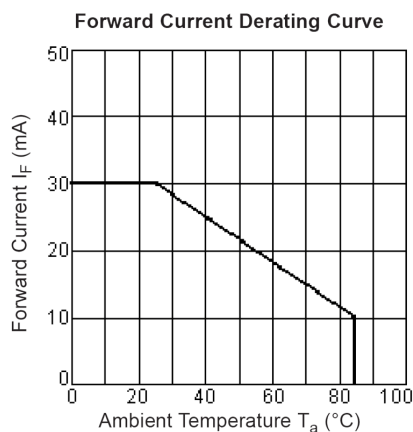
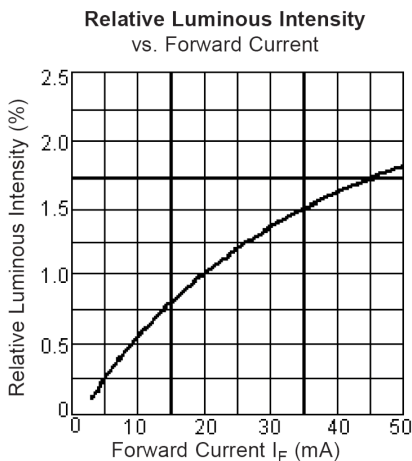
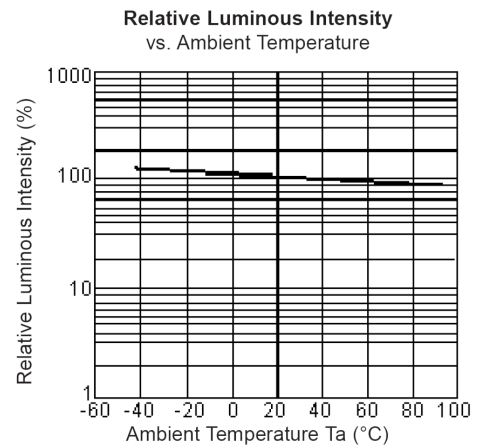
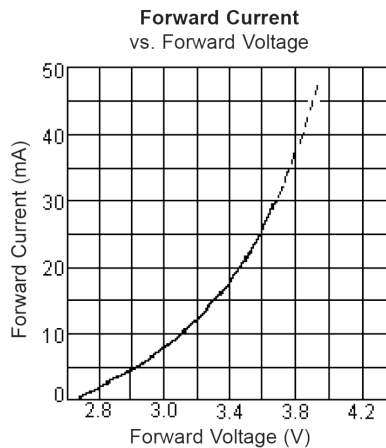
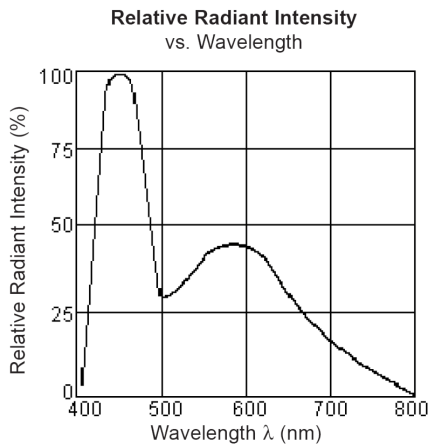
Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	7000	9000	15000	mcd	IF = 20mA
Viewing Angle	2θ 1/2	-	36	-	Degrees	
Chromaticity Coordinate	X		0.3		nm	
	Y		0.32			
Spectral Line Half-Width	Δλ	-	-	-		
Forward Voltage	V <sub>F</sub>	2.8	3.2	3.5	V	
Power Dissipation	P <sub>d</sub>	-	-	85	mW	-
Peak Forward Current (Duty 1/10 at 1kHz)	IF (Peak)	-	-	100	mA	-
Recommended Operating Current	IF (Rec)	-	20	-	mA	-

# Round LED

## Warm Super White, 3mm

**multicomp** PRO

### White Typical Electrical Optical Characteristics Curves ( $T_A = 25^\circ\text{C}$ Ambient Temperature Unless Otherwise Noted)



### Bin Code Explanation

Bin Code:

VF:

**Bin Range of Forward Voltage (Unit: V)**

BIN A: 1.0~1.2	BIN B: 1.2~1.4	BIN C: 1.4~1.6	BIN D: 1.6~1.8	BIN E: 1.8~2.0
BIN F: 2.0~2.2	BIN G: 2.2~2.4	BIN H: 2.4~2.6	BIN I: 2.6~2.8	BIN J: 2.8~3.0
BIN K: 3.0~3.2	BIN L: 3.2~3.4	BIN M: 3.4~3.6	BIN N: 3.6~3.8	BIN P: 3.8~4.0
BIN Q: 4.0~4.2	BIN R: 4.2~4.4	BIN S: 4.4~4.6	BIN T: 4.6~4.8	

# Round LED

## Warm Super White, 3mm

**multicomp** PRO

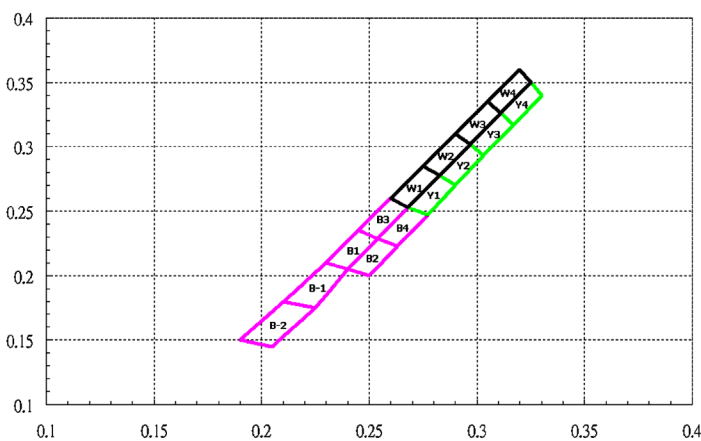
IV:

**Bin Range of Luminous Intensity (Unit: mcd)**

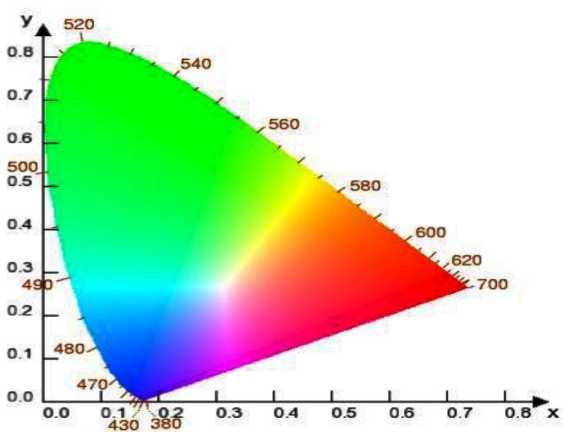
BIN 1: 0.1~4	BIN 2: 4~6	BIN 3: 6~9:	BIN 4: 9~13	BIN 5: 13~19
BIN 6: 19~28	BIN 7: 28~42	BIN 8: 42~63	BIN 9: 63~94	BIN 10: 94~140
BIN 11: 140~210	BIN 12: 210~310	BIN 13: 310~460	BIN 14: 460~690	BIN 15: 690~1000
BIN 16: 1000~1500	BIN 17: 1500~2200	BIN 18: 2200~3300	BIN 19: 3300~4900	BIN 20: 4900~7300
BIN 21: 7300~11000	BIN 22: 11000~16500	BIN 23: 16500~25000	BIN 24: 25000~32000	BIN 25: 32000~40000
BIN 26: 40000~50000	BIN 27: 50000~60000			

XY:

Bin Code	Top		Right		Bottom		Left	
	X1	Y1	X2	Y2	X3	Y3	X4	Y4
BIN B1	0.23	0.21	0.245	0.235	0.254	0.229	0.24	0.205
BIN B2	0.24	0.205	0.254	0.229	0.263	0.223	0.25	0.2
BIN B3	0.245	0.235	0.26	0.26	0.268	0.253	0.254	0.229
BIN B4	0.254	0.229	0.268	0.253	0.277	0.247	0.263	0.223
BIN W1	0.26	0.26	0.275	0.285	0.283	0.278	0.268	0.253
BIN Y1	0.268	0.253	0.283	0.278	0.29	0.27	0.277	0.247
BIN W2	0.275	0.285	0.29	0.31	0.297	0.302	0.283	0.278
BIN Y2	0.283	0.278	0.297	0.302	0.303	0.293	0.29	0.27
BIN W3	0.29	0.31	0.305	0.335	0.311	0.326	0.297	0.302
BIN Y3	0.297	0.302	0.311	0.326	0.317	0.317	0.303	0.293
BIN W4	0.305	0.335	0.32	0.36	0.325	0.35	0.311	0.326
BIN Y4	0.311	0.326	0.325	0.35	0.33	0.34	0.317	0.317



**CIE Chromaticity Coordinates Diagram**



Newark.com/multicomp-pro  
 Farnell.com/multicomp-pro  
 Element14.com/multicomp-pro

**multicomp** PRO

# Round LED

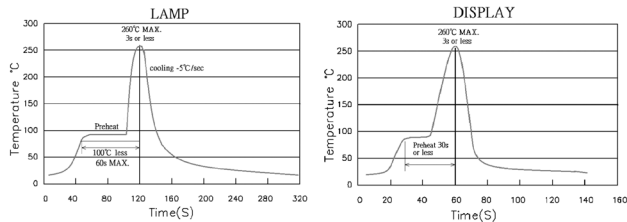
## Warm Super White, 3mm

**multicomp** PRO

### Soldering

Recommended soldering condition as shown below:

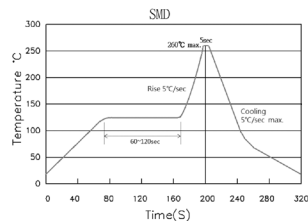
Soldering heat (DIP)



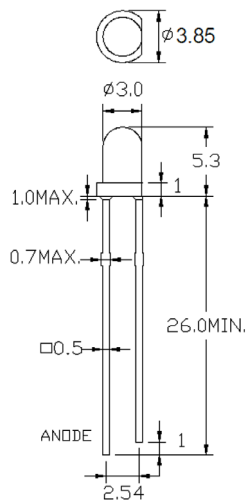
### Soldering Iron

Temperature at tip of iron: 350°C Max. Soldering Time: 3sec. ±1sec. (one time only) If temperature is higher, time should be shorter.

### Reflow Temp./Time (SMD)



### Diagram



Dimensions : Millimetres

### Part Number Table

Description	Part Number
LED, 3mm, 36°, warm super white	MCL034SWC-YH1

**Important Notice :** This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro  
 Farnell.com/multicomp-pro  
 Element14.com/multicomp-pro

**multicomp** PRO