



Opto Plus LED Corp.
1.5" Case Mold Type LED Display
OPD-S15012LB-BW
OPD-S15013LB-BW

● **FEATURES**

- 1.5 inch (38.1 mm) Digit Height.
- Low current operation.
- Case mold type.
- Black face, White segment.
- RoHS compliant, Pb Free.

● **DESCRIPTION**

The OPD-S15012LB-BW & OPD-S15013LB-BW is a 1.5 inch (38.1 mm) height single 7-segment display.

This device utilizes Super Bright Blue LED chip which are made from InGaN on a transparent GaN substrate. The display has Black face, White segment..

● **DEVICE**

PART NO Super Bright Blue	DESCRIPTION
OPD-S15012LB-BW	Common Anode
OPD-S15013LB-BW	Common Cathode

RoHS Compliance



Pb free.





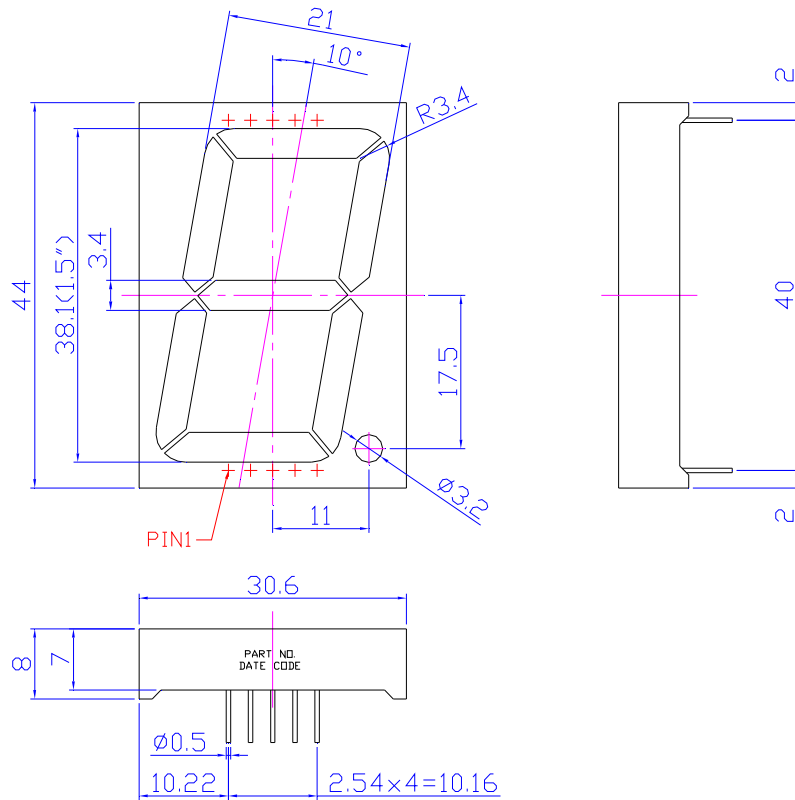
Opto Plus LED Corp.

1.5" Case Mold Type LED Display

OPD-S15012LB-BW

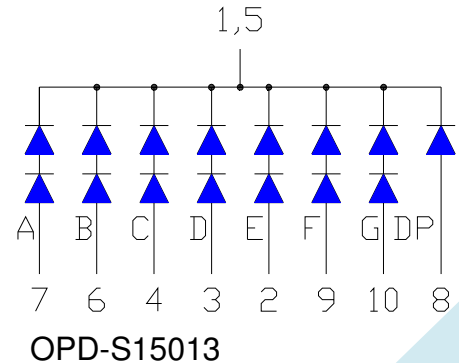
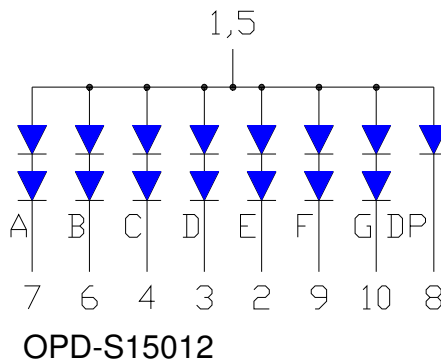
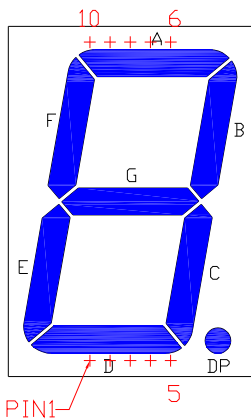
OPD-S15013LB-BW

● MECHANICAL DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerances are ± 0.25 mm unless otherwise noted.

● TYPICAL INTERNAL EQUIVALENT CIRCUIT





Opto Plus LED Corp.
1.5" Case Mold Type LED Display
OPD-S15012LB-BW
OPD-S15013LB-BW

● **LB: SUPER BRIGHT BLUE (InGaN/GaN)**

ABSOLUTE MAXIMUM RATING AT Ta=25°C

Parameter	Symbol	Super Bright Blue	Unit
Power dissipation per dice	P _{AD}	120	mW
Derating liner from 25 °C per dice	-	0.4	mA / °C
Continuous forward current per dice	I _{AF}	30	mA
Peak current per dice (duty cycle 1/10, 1kHz)	I _{PF}	100	mA
Reverse voltage per dice	V _R	5	V
Operating temperature	T _{OPR}	-25 to +85	°C
Storage temperature	T _{STG}	-25 to +85	°C

ELECTRICAL - OPTICAL CHARACTERISTICS AT Ta=25°C

Characteristic	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward voltage per Segment (DP)	V _F	I _F =20mA	-	6.4 (3.2)	8.0 (4.0)	V
Reverse current per Segment (DP)	I _R	V _R =16V (V _R =8V)	-	-	10	μA
Dominant wavelength	λ _D	I _F =20mA	-	470	-	nm
Luminous intensity	I _v	I _F =20mA	-	110	-	mcd
Spectral radiation bandwidth	Δλ	I _F =20mA	-	30	-	nm



Opto Plus LED Corp.

1.5" Case Mold Type LED Display

OPD-S15012LB-BW

OPD-S15013LB-BW

● LB: SUPER BRIGHT BLUE (InGaN/GaN) CURVE

Typical Electro-optical Characteristic Curves
(25 °C Free Air Temperature Unless Otherwise Specified)

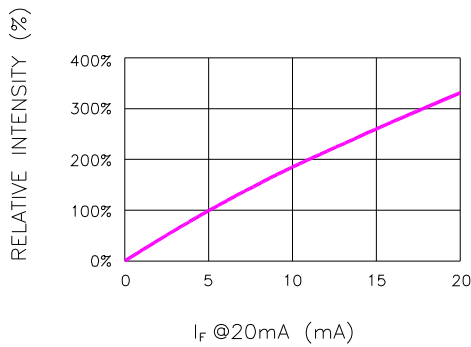


Fig.1 RELATIVE INTENSITY VS. FORWARD CURRENT



Fig.2 FORWARD CURRENT VS. FORWARD VOLTAGE

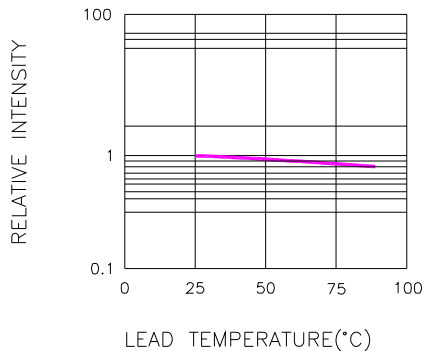


Fig.3 RELATIVE INTENSITY VS. LEAD TEMPERATURE
(PULSED 20 mA; 300us PULSE, 10ms PERIOD)

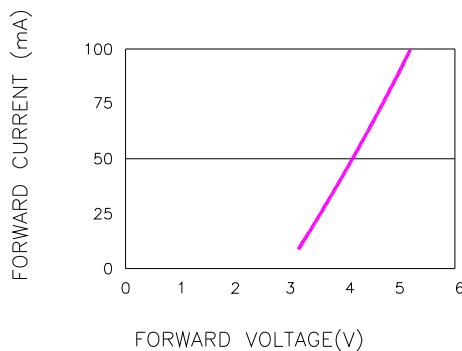


Fig.4 PEAK FORWARD VOLTAGE VS. FORWARD (100us TEST PULSE, 1% DUTY CYCLE)

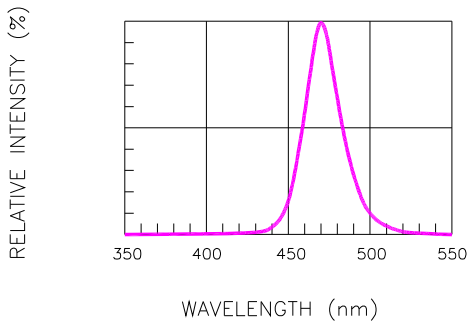


Fig.5 RELATIVE INTENSITY VS. WAVELENGTH

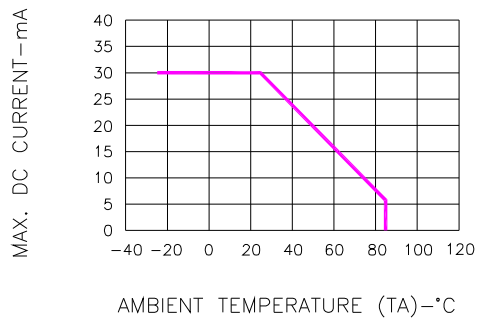


Fig.6 MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE



Opto Plus LED Corp.
1.5" Case Mold Type LED Display
OPD-S15012LB-BW
OPD-S15013LB-BW

● **RECOMMEND SOLDERING PROFILE**



● **SOLDERING IRON**

Basic spec is ≤ 4 sec when 260°C. If temperature is higher, time should be shorter (+10°C→1 sec). Power dissipation of Iron should be smaller than 15W, and temperature should be controllable. Surface temperature of the device should be under 230°C.

● **REWORK**

Customer must finish rework within ≤ 4 sec under 245°C.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [LED Displays & Accessories](#) category:

Click to view products by [Opto Plus Led Corp](#) manufacturer:

Other Similar products are found below :

[LTC-2721WC](#) [LTC-4624JD](#) [LTC-4627G](#) [LTC-4627WC](#) [LTD-5021AWC](#) [LTM-8522G](#) [LTP-4323P](#) [LTP-747G](#) [LTS-3361JG-06](#)
[F416SYGWA/S530-E3](#) [EADST040RA2](#) [1668](#) [HT-F196NB-5323](#) [IPD2131-27](#) [SA03-12EWA](#) [LDD-E2802RD](#) [LDD-E306MI](#) [LDQ-N514RI](#)
[LDS-A3506RD](#) [LDS-A3926RI](#) [LDT-M516RI](#) [SC03-12HDB](#) [SI-B9T151550WW](#) [SI-B9V171550WW](#) [SLC-3PF-WL](#) [1624](#) [LTC-2621JD](#)
[LTC-2623WC](#) [LTC-4624P](#) [LTC-4627JD](#) [LTD-2601E](#) [LTD-322G](#) [LTD-482PC](#) [LTP-1457AKR](#) [LTP-3784G-01](#) [LTS-313AP](#) [LTS-4812SKR-](#)
[P](#) [LTS-547AE](#) [LTS-6780P](#) [446010401-3](#) [HV-7W30-6829](#) [CA12240_MINNIE-WWW-MTG-ASSY](#) [DA43-11GWA](#) [LDD-A516RI-17](#) [LDD-](#)
[E305RI](#) [LDQ-M513RI](#) [LDQ-M5204RI-SI](#) [LDQ-N3402RI](#) [LDQ-N3606RI](#) [LDT-M2804RI](#)