



American Opto Plus LED Corp.
0.39”SMD Type LED Display
SMC/A-394LB G/W

● **EDIT HISTORY**

Version A: Apr. 31, 2009

New color data sheet.



American Opto Plus LED Corp.

0.39" SMD Type LED Display

SMC/A-394LB G/W

● FEATURES

- 0.39 inch (10.0 mm) Digit Height.
- Low current operation.
- SMD type.
- Gray face, White segment.
- RoHS compliant, Pb Free.

● DESCRIPTION

The SMC/A-394LB G/W is a 0.39 inch (10.0 mm) height quadruple digits display. This device utilizes Super Bright Blue LED chip which are made from InGaN on a transparent GaN substrate. The display has Gray face, White segment.

● DEVICE

PART NO	DESCRIPTION
Super Bright Blue	Common Anode / Cathode
SMC/A-394LB G/W	

RoHS Compliance



Pb free.



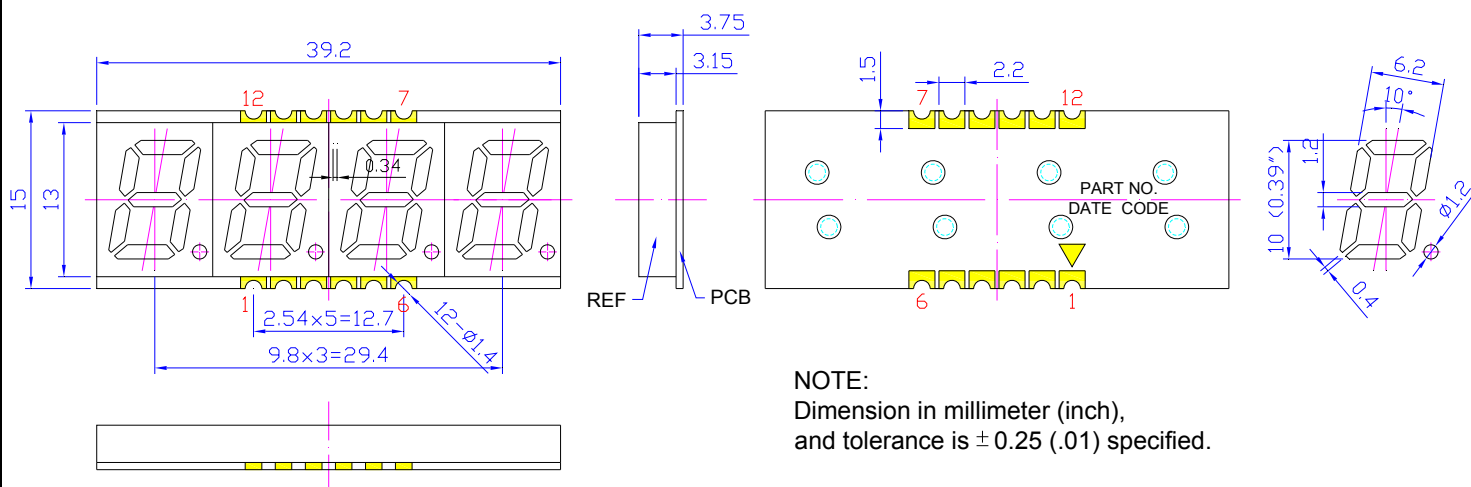


American Opto Plus LED Corp.

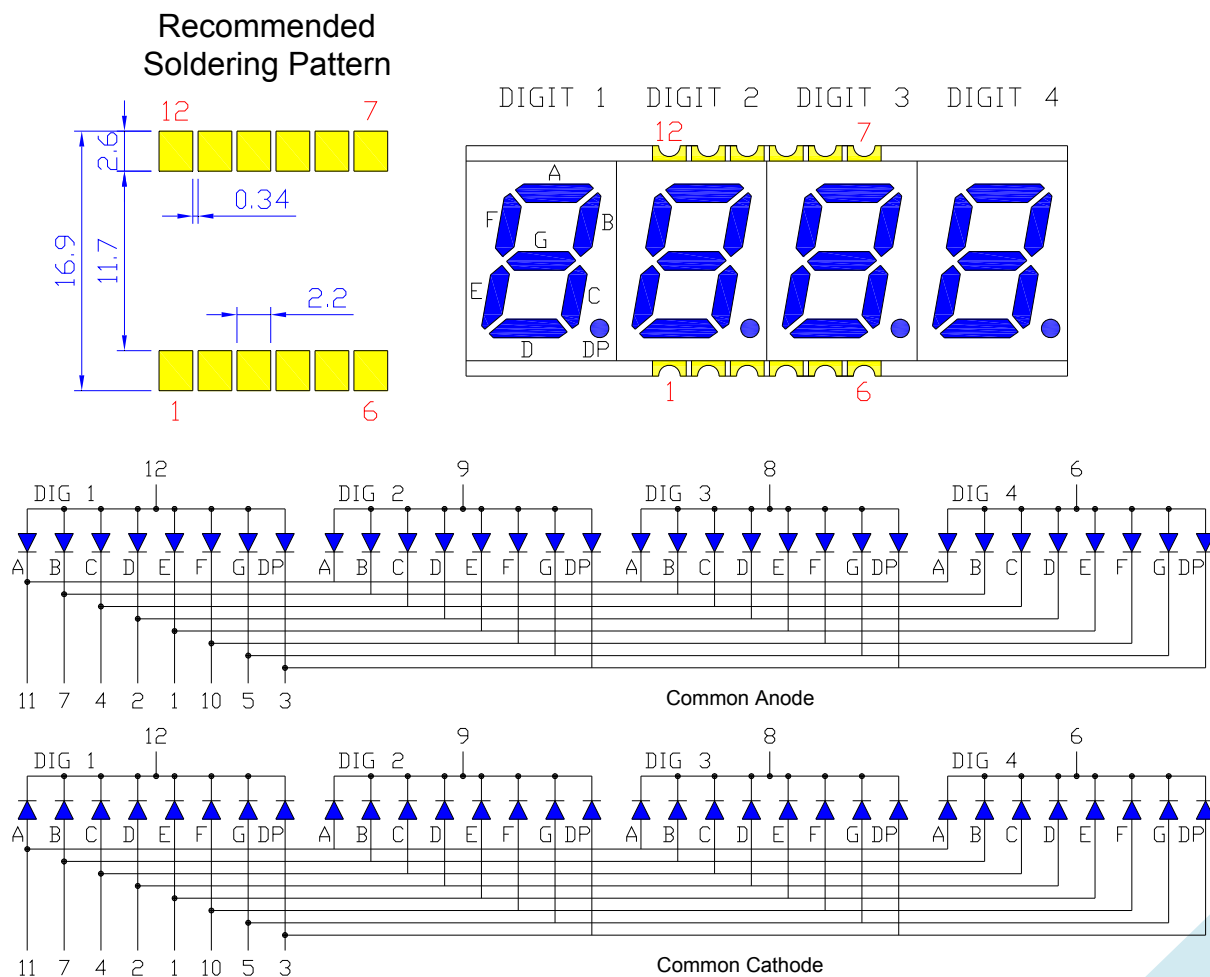
0.39" SMD Type LED Display

SMC/A-394LB G/W

MECHANICAL DIMENSIONS



TYPICAL INTERNAL EQUIVALENT CIRCUIT





American Opto Plus LED Corp.

0.39" SMD Type LED Display

SMC/A-394LB G/W

● 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	-	0.3	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}	-40 to +105	°C
Storage temperature	T _{STG}	-40 to +105	°C

ELECTRICAL - OPTICAL CHARACTERISTICS AT Ta=25°C

Characteristic	Symbol	Condition	Min.	Type	Max.	Unit
Forward Voltage	V _F	I _F =5mA	2.7	2.85	3.0	V
Reverse Current	I _R	V _R =8V	-	-	10	μA
Dominant Wavelength	λ _d	I _F =5mA	450	470	480	nm
Average Luminous Intensity	I _V	I _F =5mA	10	30	40	mcd
Spectrum Radiation Bandwidth	Δλ	I _F =5mA	-	30	-	nm



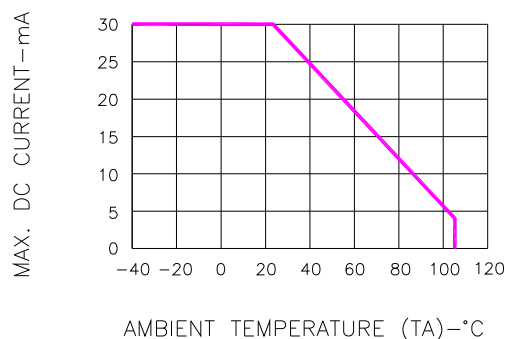
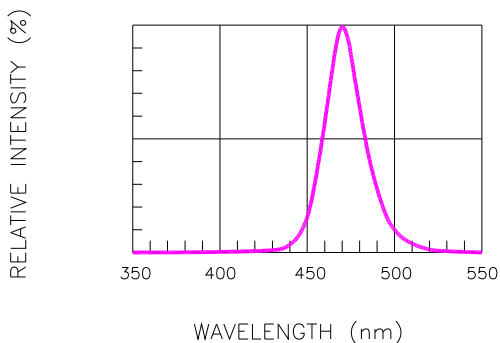
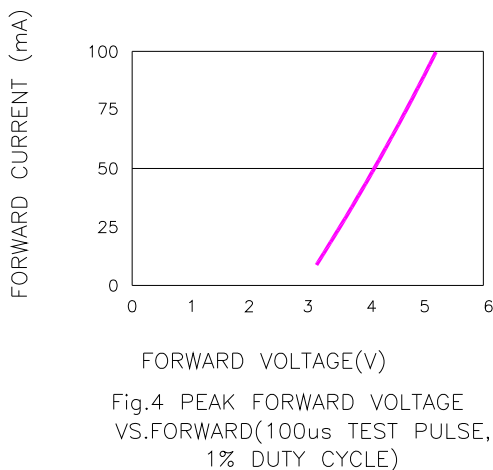
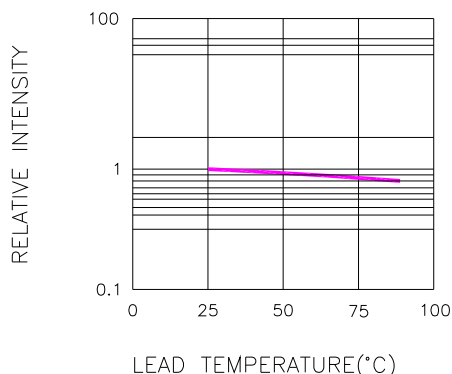
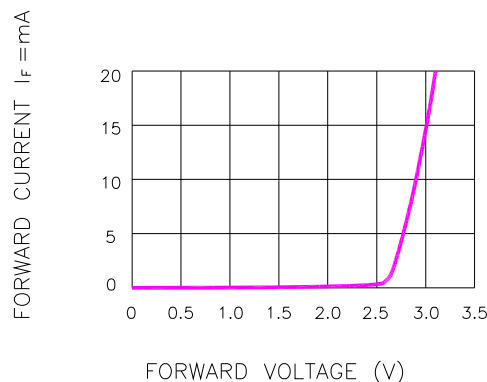
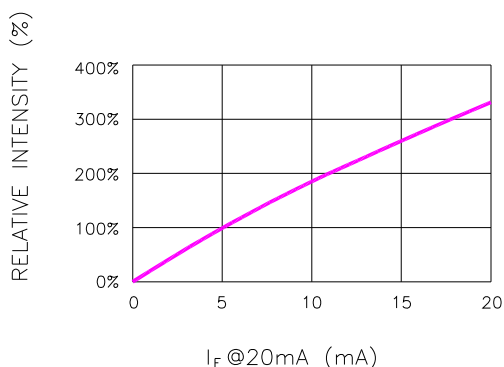
American Opto Plus LED Corp.

0.39"SMD Type LED Display

SMC/A-394LB G/W

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

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





American Opto Plus LED Corp.

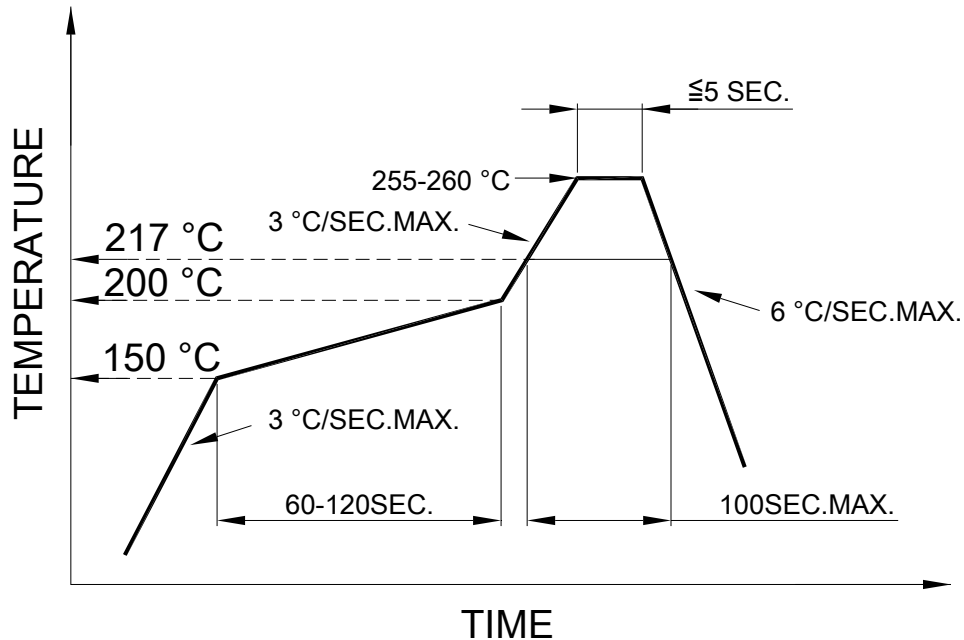
0.39" SMD Type LED Display

SMC/A-394LB G/W

● SMT REFLOW SOLDERING INSTRUCTIONS

SMT Soldering Profile

Pb free reflow 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 5 sec. under 260°C.
- The head of soldering iron cannot touch copper foil.

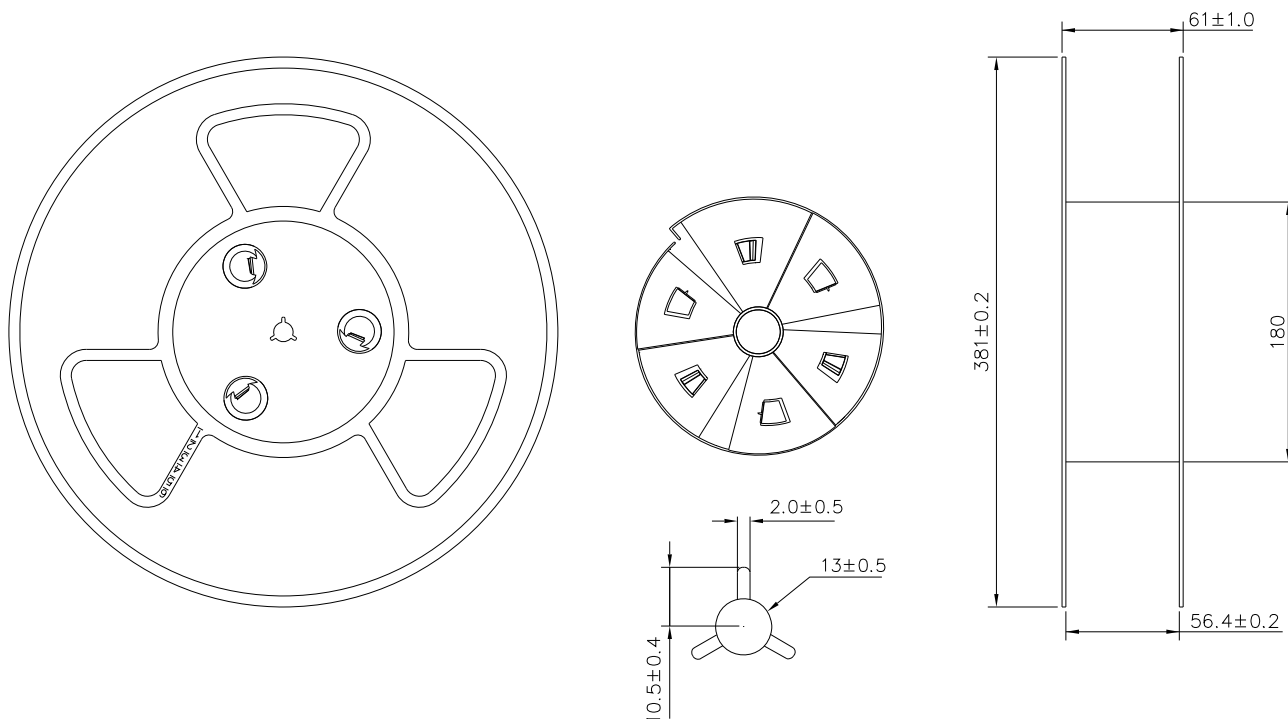


American Opto Plus LED Corp.

0.39" SMD Type LED Display

SMC/A-394LB G/W

● REEL DIMENSIONS



● PACKING & LABEL SPECIFICATIONS

