

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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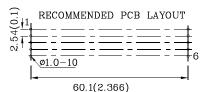
57mm (2.3") SINGLE DIGIT NUMERIC DISPLAY

### **Features**

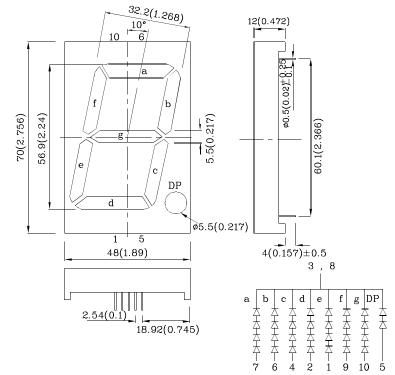
- Low power consumption
- ullet Robust package
- I.C. Compatible
- Standard configuration: Gray face w/ white segments
- Optional black face provides superior color contrast
- RoHS Compliant







## Package Schematics



Notes:

1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.

2. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)	MYK (AlGaInP)	Unit	
Reverse Voltage (Per Chip)	$V_{\mathrm{R}}$	5	V
Forward Current (Dp)	$I_{\mathrm{F}}$	30 (30)	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width ( Dp)	ifs	175 (175)	mA
Power Dissipation ( Per Chip)		150	mW
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	
Lead Solder Temperature [2mm Below Package Base]	260°C For 3~5 Seconds		

Operating Characteristics (T <sub>A</sub> =25°C)		MYK (AlGaInP)	Unit
Forward Voltage (Typ.) (Dp) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	7.8 (3.9)	V
Forward Voltage (Max.) ( Dp) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	10 (5.0)	V
Reverse Current (Max.) ( Per Chip) ( $V_R=5V$ )	$I_R$	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) $(I_F=10\text{mA})$	λΡ	590*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=10\text{mA})$	λD	590*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	△λ	20	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	20	pF

Part Number	Emitting Color	Emitting Material	CIE127-2007* (IF=10mA) ucd		Wavelength CIE127-2007* nm λP	Description
			min.	typ.		
XDMYK57C	Yellow	AlGaInP	255000 88000*	719990 209990*	590*	Common Cathode, Rt. Hand Decimal

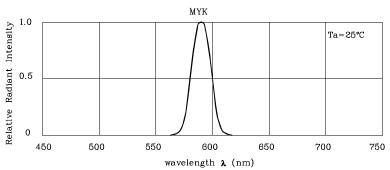
<sup>\*</sup>Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Mar 10.2014

XDSB7719 V1-X Layout: Maggie L.



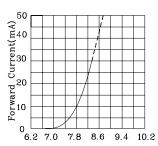
www.SunLEDusa.com

### 57mm (2.3") SINGLE DIGIT NUMERIC DISPLAY

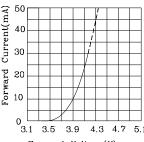


RELATIVE INTENSITY Vs. CIE WAVELENGTH

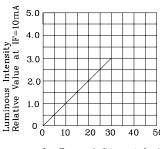
### **❖** MYK



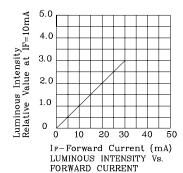
Forward Voltage(V) FORWARD CURRENT ٧s FORWARD VOLTAGE



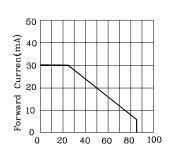
Forward Voltage(V) FORWARD CURRENT FORWARD VOLTAGE ٧s



IF-Forward Current (mA) LUMINOUS INTENSITY FORWARD CURRENT

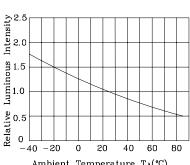


Curren(mA) 30 20 Forward 10 100 20 40 60 80 Ambient Temperature  $T_A$  (°C) FORWARD CURRENT DERATING CURVE

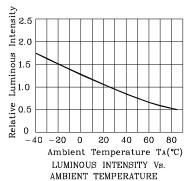


Ambient Temperature TA(°C)

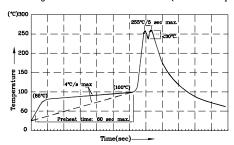
FORWARD CURRENT DERATING CURVE



Ambient Temperature TA(°C) LUMINOUS INTENSITY Vs AMBIENT TEMPERATURE



Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



- pre-heat temperature of 105°C or less (as measured e attached to the LED pins) prior to immersion in the maximum solder bath temperature of 280°C
- 3.Do not apply stress to the epoxy resin while the temperature is above 85°C.
  4.Fixtures should not incur stress on the component when mounting and
- during soldering process

  5.SAC 305 solder alloy is recommended.
  6.No more than one wave soldering pass.
  7.During wave soldering, the PCB top-surface temperature should be kept below 105°C.

### Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux, or wavelength),

the typical accuracy of the sorting process is as follows:

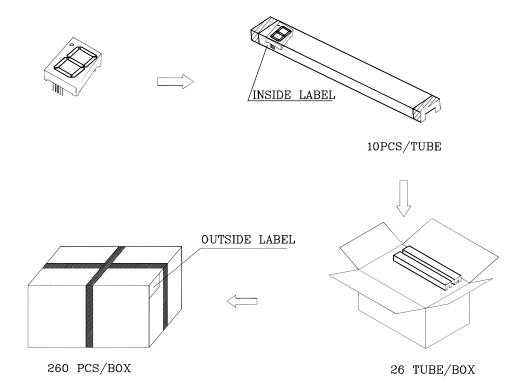
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

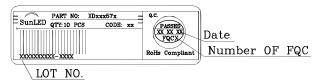




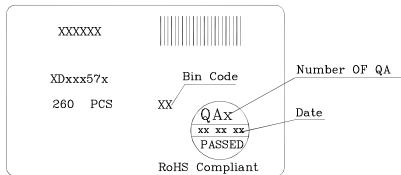
### PACKING & LABEL SPECIFICATIONS



### Inside Label On IC-tube



### Outside Label On Box



### TERMS OF USE

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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
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- 6. Additional technical notes are available at <a href="http://www.SunLEDusa.com/TechnicalNotes.asp">http://www.SunLEDusa.com/TechnicalNotes.asp</a>

Mar 10,2014