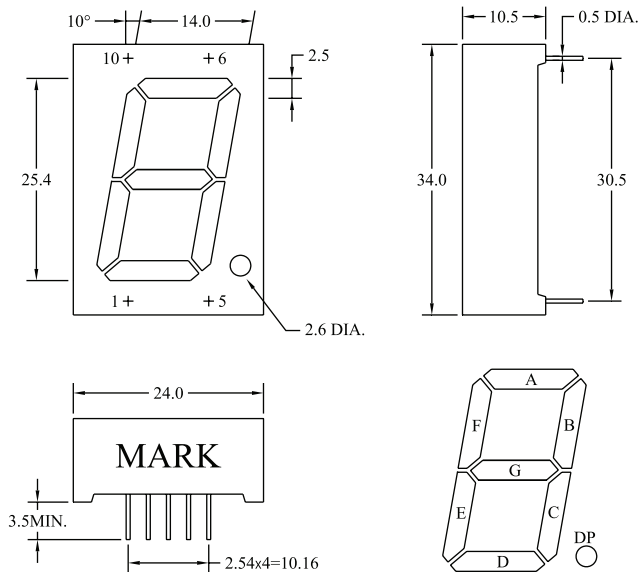


# 1" Single Digit Display

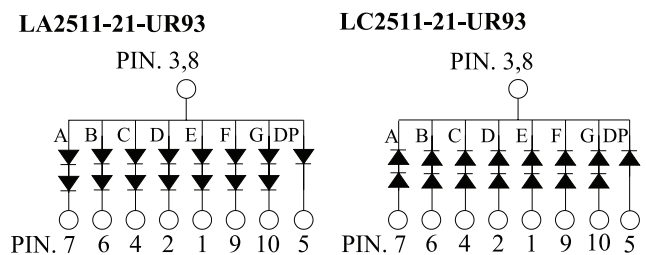


## Package Dimensions:



All dimensions are in mm  
 Tolerance:  $\pm 0.25\text{mm}$   
 The slope angle of any PIN may be  $\pm 5^\circ$  max

## Internal Circuit Diagram:



## Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

Parameter	Symbol	Rating	Unit	
Power Dissipation - Pre Segment	$P_D$	Seg	240	mW
		DP	120	
Pulse Current (1/10 Duty Cycle, 0.1ms Pulse Width)	$I_{FP}$	100	mA	
Forward Current - Per Chip	$I_F$	30	mA	
Reverse (Leakage) Current - Per Chip	$I_r$	100	$\mu\text{A}$	
Reverse Voltage - Per Chip	$V_R$	5	V	
Operating Temperature Range	$T_{opr.}$	-25 to +85	$^\circ\text{C}$	
Storage Temperature Range	$T_{stg.}$	-40 to +100	$^\circ\text{C}$	
Soldering Temperature	$T_{sol.}$	Dip Soldering: $260^\circ\text{C}$ for 5sec. Hand Soldering: $350^\circ\text{C}$ for 3 sec.		
Electrostatic Discharge	ESD	6,000	V	



# 1" Single Digit Display



## Electrical & Optical Characteristics:

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity - Per Segment	$I_v$	$I_f=10\text{mA/seg.}$	76	160		mcd
Forward Voltage	$V_f$	DP		6.4	8	V
		Seg		$I_f=20\text{mA/seg.}$	3.2	
Peak Wavelength	$\lambda_p$	$I_f=20\text{mA/seg.}$				nm
Dominant Wavelength	$\lambda_d$	$I_f=20\text{mA/seg.}$		520		nm
Reverse Current - Per Chip (Leakage Current - Per Chip)	$I_r$	$V_r=5\text{V}$			50	$\mu\text{A}$
Spectrum Line Halfwidth	$\Delta\lambda$	$I_f=20\text{mA/seg.}$		35		deg
Response Time	T			250		nm

Note: Customer's special requirements are also welcome.

## Typical Electrical & Optical Characteristics Curves:

(25°C Ambient temperature unless otherwise noted)

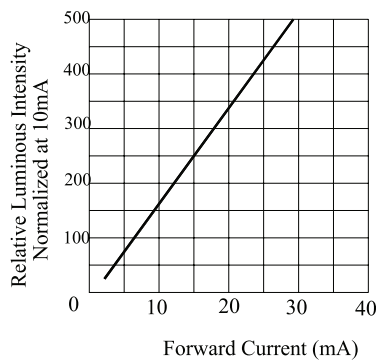


Fig.5 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

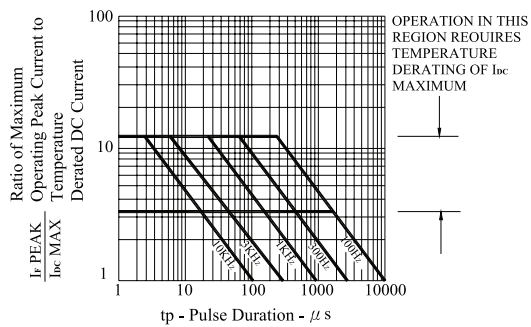


Fig.2 MAXIMUM TOLERABLE PEAK CURRENT VS. PULSE DURATION



# 1" Single Digit Display

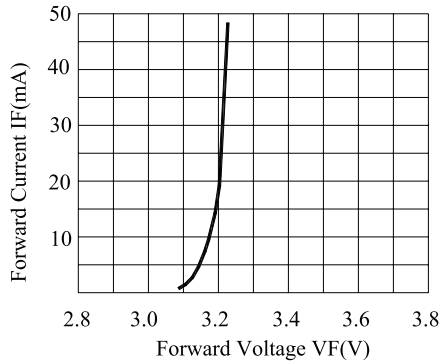


Fig. 3 FORWARD CURRENT VS.

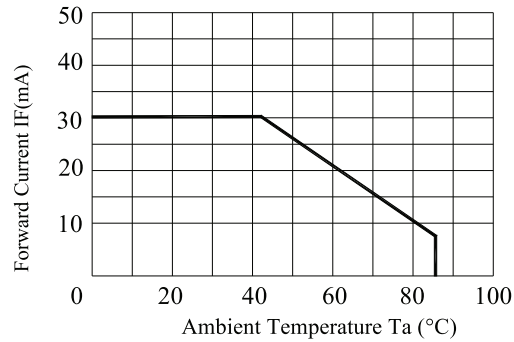


Fig. 4 FORWARD CURRENT VS. DERATING CURVE

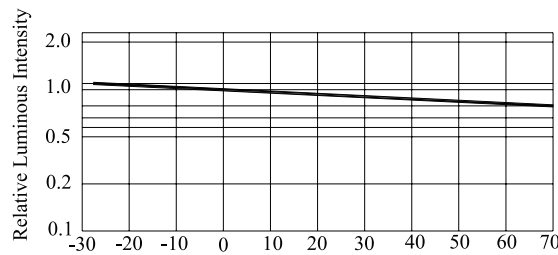


Fig. 6 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

## Part Number Table

LED Chip		Face Colour		Part Number
Material	Emitting Colour	Surface	Segments	
InGaN / Sapphire	True green	Grey	White	703-0178
InGaN / Sapphire	True green	Grey	White	703-0179

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