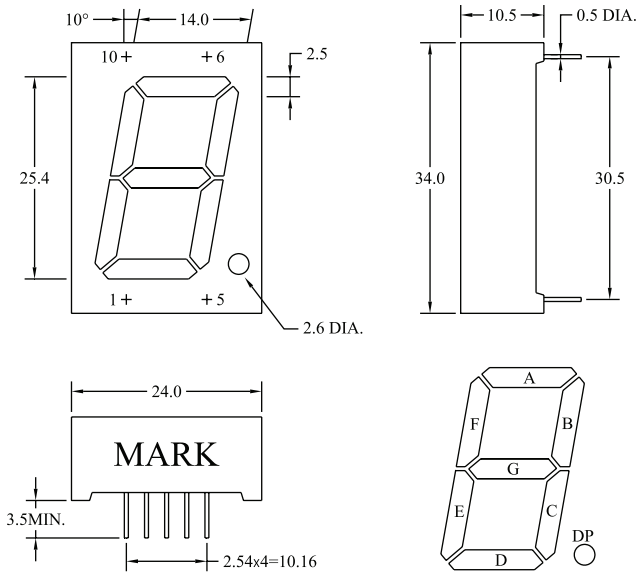


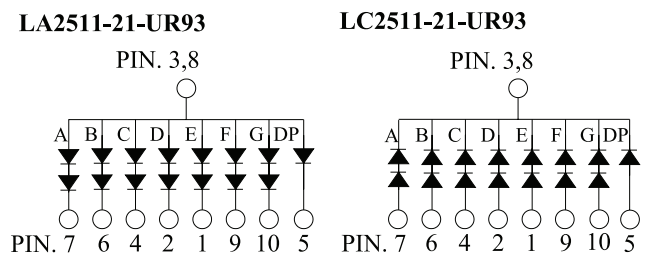
# 1" Single Digit Display



## Package Dimensions:



## Internal Circuit Diagram:



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

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

Parameter	Symbol	Rating	Unit	
Power Dissipation - Pre Segment	P <sub>D</sub>	DP	72	mW
		Seg	144	
Pulse Current (1/10 Duty Cycle, 0.1ms Pulse Width)	I <sub>FP</sub>	100	mA	
Forward Current - Per Chip	I <sub>F</sub>	30	mA	
Reverse (Leakage) Current - Per Chip	I <sub>r</sub>	100	$\mu\text{A}$	
Reverse Voltage - Per Chip	V <sub>R</sub>	5	V	
Operating Temperature Range	T <sub>opr.</sub>	-25 to +85	$^\circ\text{C}$	
Storage Temperature Range	T <sub>stg.</sub>	-40 to +100	$^\circ\text{C}$	
Soldering Temperature	T <sub>sol.</sub>	Dip Soldering: 260 $^\circ\text{C}$ for 5sec. Hand Soldering: 350 $^\circ\text{C}$ for 3 sec.		



# 1" Single Digit Display



## Electrical & Optical Characteristics:

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity - Per Segment	Iv	If=10mA	15.4	34		mcd
Forward Voltage	Vf	DP		1.9	2.4	V
		Seg		3.8	4.8	
Peak Wavelength	$\lambda_p$	If=20mA		650		nm
Dominant Wavelength	$\lambda_d$	If=20mA		639		nm
Reverse Current - Per Chip (Leakage Current - Per Chip)	Ir	Vr=5V			100	$\mu$ A
Spectrum Line Halfwidth	$\Delta\lambda$	If=20mA		20		deg
Response Time	T			250		nm

Note: Customer's special requirements are also welcome.

## Electrical & Optical Characteristics: Hyper Red

Bin Name		R	S	T	U	V
IV (mcd)	Min.	15.4	22	31.45	44.95	58.45
	Max.	22	31.45	44.95	58.45	76

## Typical Electrical & Optical Characteristics Curves:

(25°C Ambient temperature unless otherwise noted)

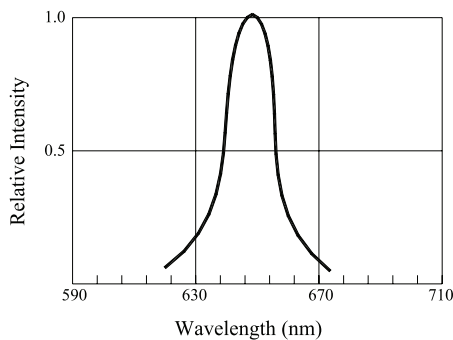


Fig.1 RELATIVE INTENSITY VS. WAVELENGTH

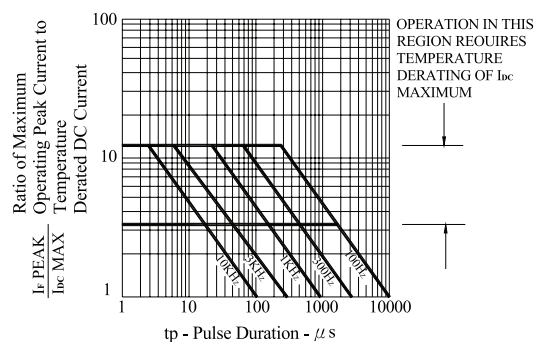


Fig.2 MAXIMUM TOLERABLE PEAK CURRENT VS. PULSE DURATION



# 1" Single Digit Display

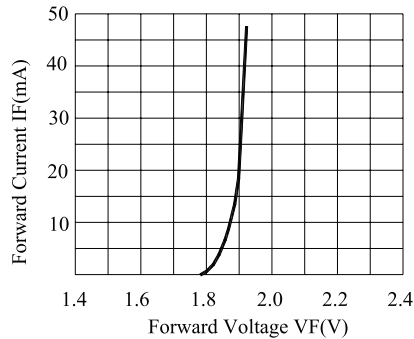


Fig.3 FORWARD CURRENT VS. FORWARD VOLTAGE PER CHIP

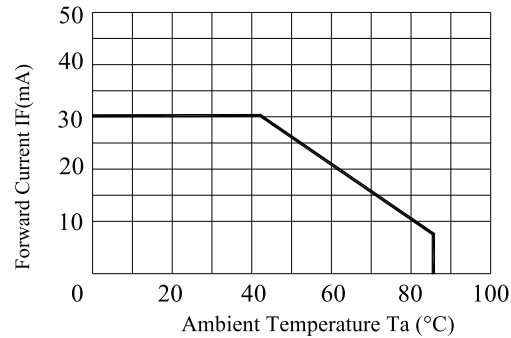


Fig.4 FORWARD CURRENT VS. DERATING CURVE

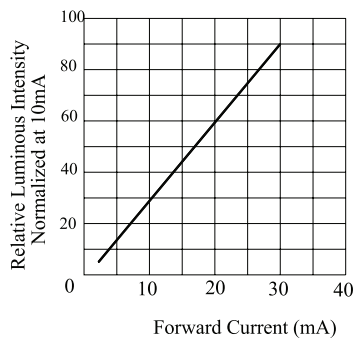


Fig.5 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

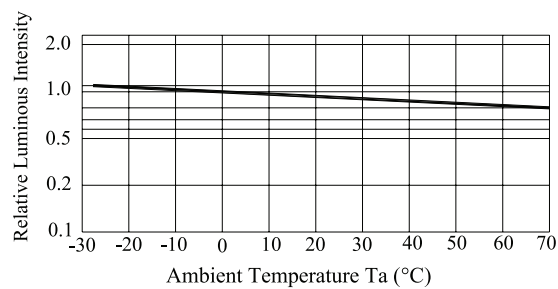


Fig.6 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

## Part Number Table

LED Chip		Face Colour		Part Number
Material	Emitting Colour	Surface	Segments	
AlGaIn / GaAs	Deep Red	Grey	White	703-0176
AlGaIn / GaAs	Deep Red	Grey	White	703-0177

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