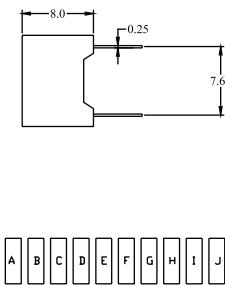
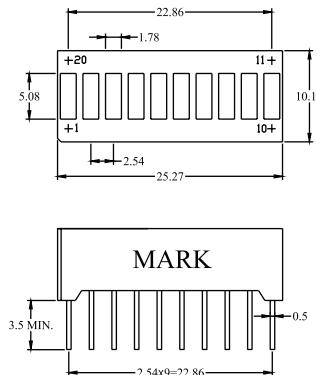


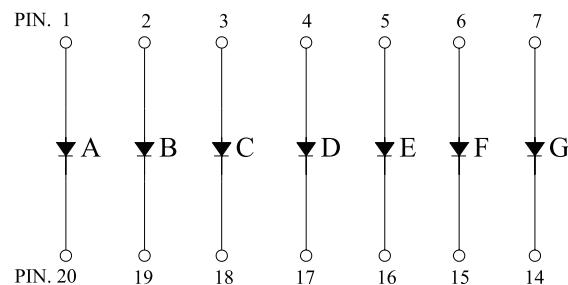
10 Segment Light Bar



Package Dimensions:



703-0190:



All dimensions are in mm

Tolerance: ± 0.25 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	78	mW
Pulse Current (1/10 Duty Cycle, 0.1ms Pulse Width) - Per Chip	I_{FP}	100	mA
Forward Current - Per Chip	I_F	30	mA
Reverse (Leakage) Current - Per Chip	I_r	100	μA
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.	

10 Segment Light Bar

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Electrical & Optical Characteristics:

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity - Per Segment	I_v	$I_f=10\text{mA} / \text{Dot}$	1.7	3.9		mcd
Forward Voltage	V_f	$I_f=20\text{mA} / \text{Dot}$		2.1	2.6	V
Peak Wavelength	λ_p	$I_f=20\text{mA} / \text{Dot}$		635		nm
Dominant Wavelength	λ_d	$I_f=20\text{mA} / \text{Dot}$		626		nm
Reverse Current - Per Chip (Leakage Current - Per Chip)	I_r	$V_r=5\text{V}$			100	μA
Spectrum Line Halfwidth	$\Delta\lambda$	$I_f=20\text{mA} / \text{Dot}$		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)

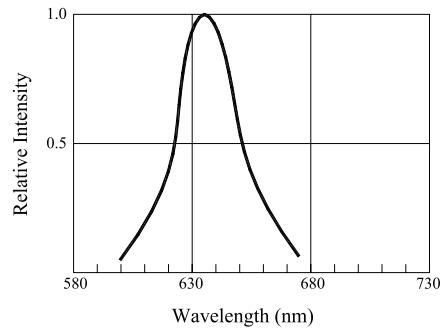


Fig.1 RELATIVE INTENSITY VS.
WAVELENGTH

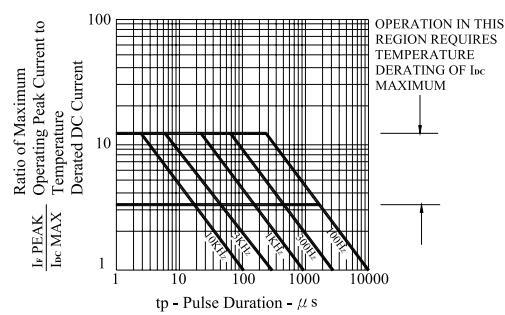


Fig.2 MAXIMUM TOLERABLE PEAK CURRENT VS. PULSE DURATION

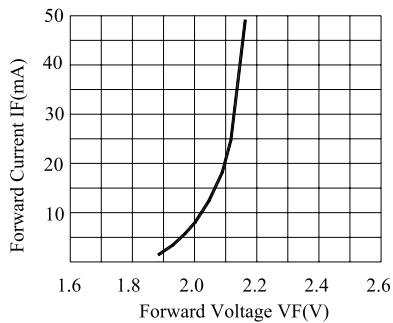


Fig.3 FORWARD CURRENT VS.
FORWARD VOLTAGE PER CHIP

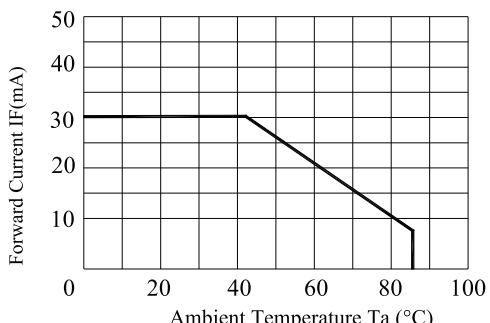


Fig.4 FORWARD CURRENT VS.
DERATING CURVE

10 Segment Light Bar

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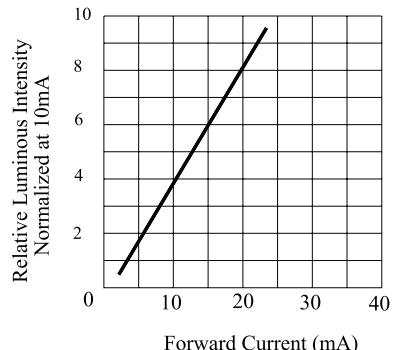


Fig.5 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

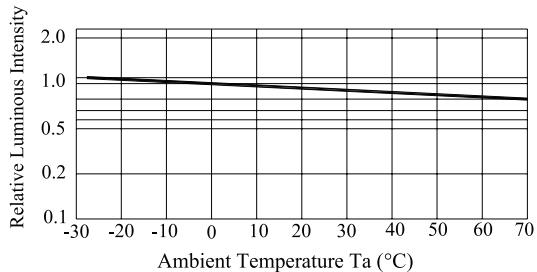


Fig.6 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

Part Number Table

LED Chip		Face Colour		Part Number
Material	Emitting Colour	Surface	Segments	
GaAsP / GaP	Orange	Grey	White	703-0190

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