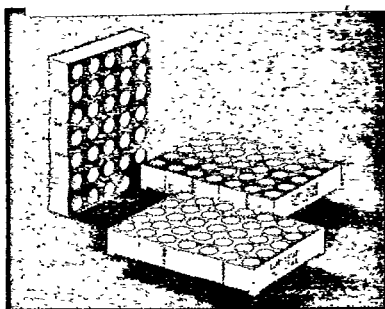




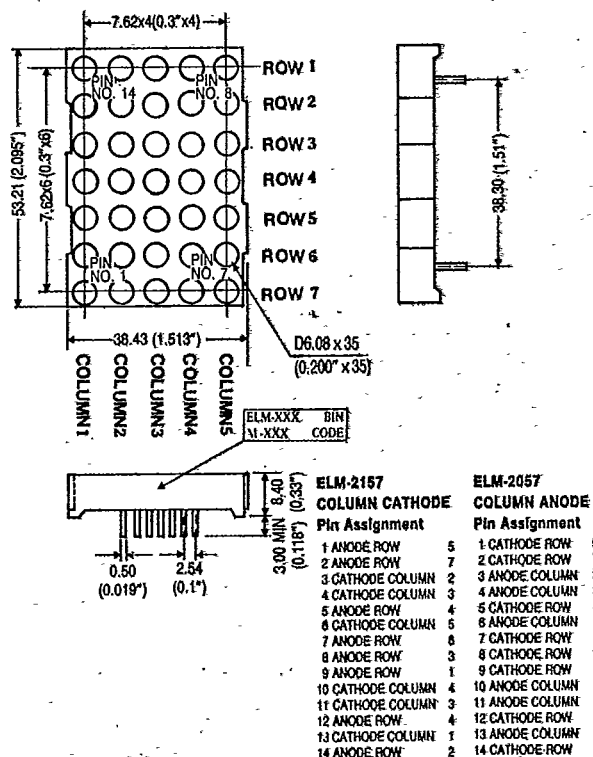
ELM-2057/2157 SERIES

5 x 7 Dot Matrix LED Display (2.0 inch)

MAIN FEATURES:

- * 2.0 INCH CHARACTER HEIGHT.
- * LARGE EMITTING DOT, 0.2" DIAMETER.
- * LOW POWER/HIGH BRIGHTNESS.
- * X-Y STACKABLE PACKAGE WITH INTEGRATED ALIGNMENT KEYS.

Package Dimensions:



NOTE: All dimensions are in inches, tolerance is 0.010" unless otherwise noted.
millimeters 0.25mm

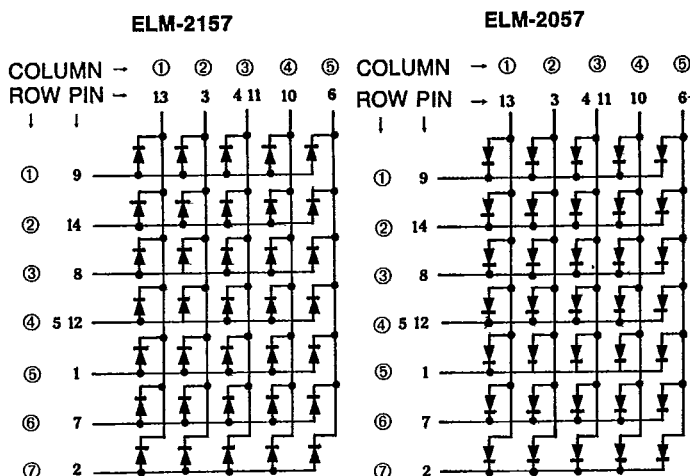
DESCRIPTION:

The ELM-2057/2157 series uses large emitting area (5mm diameter) LED sources configured in a 35 dots 5x7 matrix array.

These devices provide a choice of two colors and are available as either column cathode or column anode.

All types are white dots with grey surface.

INTERNAL CIRCUIT DIAGRAM



ABSOLUTE MAXIMUM RATINGS: (Ta = 25°C)

Reverse Voltage	: 5 Volt
Reverse Current (Vr = 5V)	: 10μA
Operating Temperature Range	: -40°C To 85°C
Storage Temperature Range	: -40°C To 100°C
Lead Soldering Temperature	: 260°C For 5 Seconds
[1.6 mm (0.063 inch) From Body]	

Parameter Description	Symbol	Unit
Spectral Line Half-Width	$\Delta\lambda$	nm
Power Dissipation	Pd	mW
Peak Forward Current (Duty 1/10, @ 1 KHz)	If (Peak)	mA
Recommended Operating Current	If (Rec)	mA
Average Luminous Intensity *1.2 (If = 10mA)	Iv	μcd
Luminous Intensity Matching Ratio	Iv-m	
Forward Voltage (If = 20mA)	Vf	V

PART SELECTION AND APPLICATION INFORMATION (RATINGS AT 25°C AMBIENT)

New Model No.	Old Model No.	Chip		C.C. or C.A.	Peak Wave Length λP (nm)	Absolute Maximum Ratings				Electro-Optical Characteristics						Iv-m	Remark
		Material	Emitted Color			Δλ	Pd	If	If (Peak)	Vf (V)			If (Rec)	Iv (μcd)			
										Min.	Typ.	Max.		Min.	Typ.		
ELM-2157AG	M2001GWA	GaP	Green	Column	565	30	100	30	160	1.7	2.1	2.8	10~20	700	1800	2:1	
ELM-2157AE	M2001EWA	GaAsP/GaP	Orange	Cathode	635	45	100	30	160	1.7	2.0	2.8	10~20	900	2200	2:1	**
ELM-2057AG	M2002GWA	GaP	Green	Column	565	30	100	30	160	1.7	2.1	2.8	10~20	700	1800	2:1	
ELM-2057AE	M2002EWA	GaAsP/Gap	Orange	Anode	635	45	100	30	160	1.7	2.0	2.8	10~20	900	2200	2:1	*