LED DISPLAY

TLR372, TLR373 TLG372, TLG373

— PRELIMINARY —

• 5 x 7 DOT MATRIX LED DISPLAY

- 6.0 mm high character. (0.24 inch)
- High efficiency at lower current. (Light emitting's materials: GaP)
- X-Y matrix connection. (Multiplex drive)
- 36 light emitting diodes including decimal point.
- Capable of displaying full ASCII characters.
- Pin for pin compatibility with MAN2A, DL-57.
- Application Keyboard verifier, Computer peripheral display, Information display.

Refer to page 153 for the figure.

MAXIMUM RATING (Ta = 25°C)

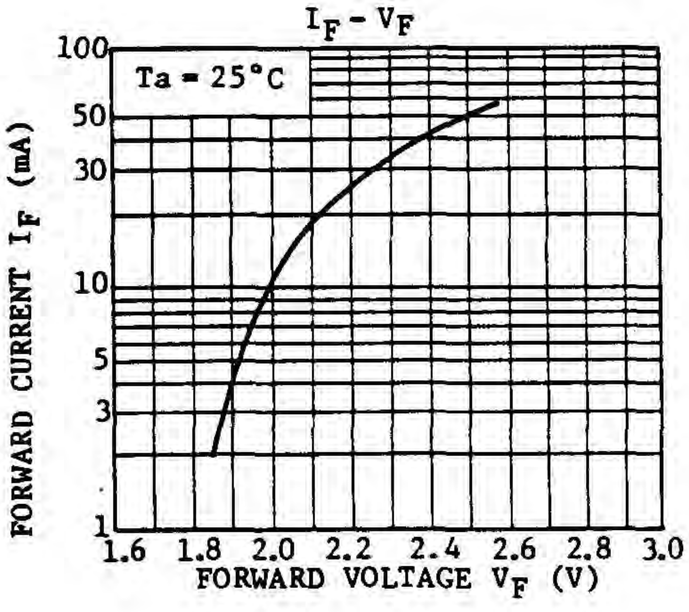
CHARACTERISTIC	SYMBOL	RATING	UNIT
Pulse Forward Current (Note 1)	I_{FP}/Dot	30	mA
Reverse Voltage	V_R	6	V
Storage Temperature Range	T_{stg}	-30∿100	°C
Operating Temperature Range	T_{opr}	-30∿ 85	°C

Note 1. Duty Ratio = 1/7, Pulse width = 1 (ms)

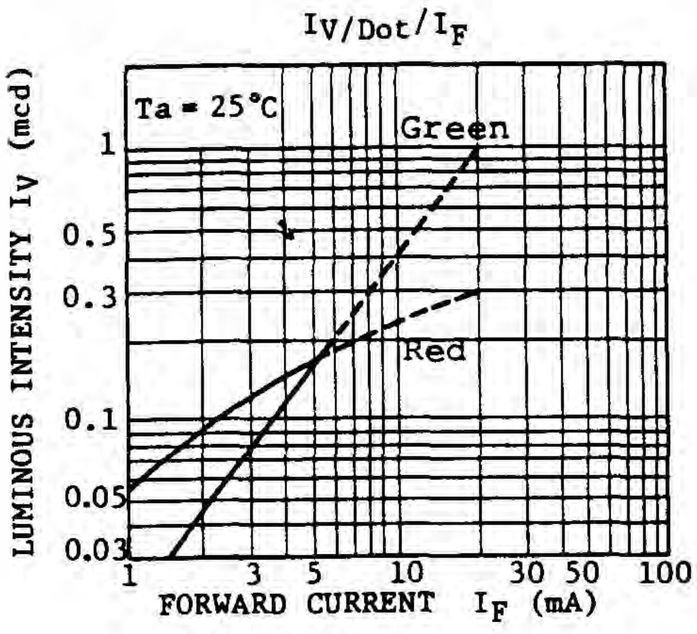
ELECTRICAL-OPTICAL CHARACTERSITICS (Ta = 25°C)

CHARACTERISTICS		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage		V_F	I_{FP} = 20 mA	1.8	2.15	2.75	V
Reverse Current		I_R	V_R = 6 V	-	-	5	μA
Luminous Intensity	Red	I_{V1}/Dot	I_{FP} = 20 mA Duty Ratio = 1/7	-	0.045	-	mcd
	Green	I_{V2}/Dot		-	0.14	-	mcd
Luminous Intensity Matching		I_{V-M}	I_{FP}=20mA, Duty Ratio=1/7	-	-	2.0	-
Peak Emission Wave length	Red	λ_{P1}	I_F = 10 mA	-	700	-	nm
	Green	λ_{P2}		-	565	-	nm
Spectral Line Half Width	Red	$\Delta\lambda_1$	I_F = 10 mA	-	100	-	nm
	Green	$\Delta\lambda_2$		-	25	-	nm
Thermal luminous Intensity		ΔI_V	—	-	-1.0	-	%/°C
Thermal Resistance		Rthj-a/Dot	—	-	6.3	-	°C/mW

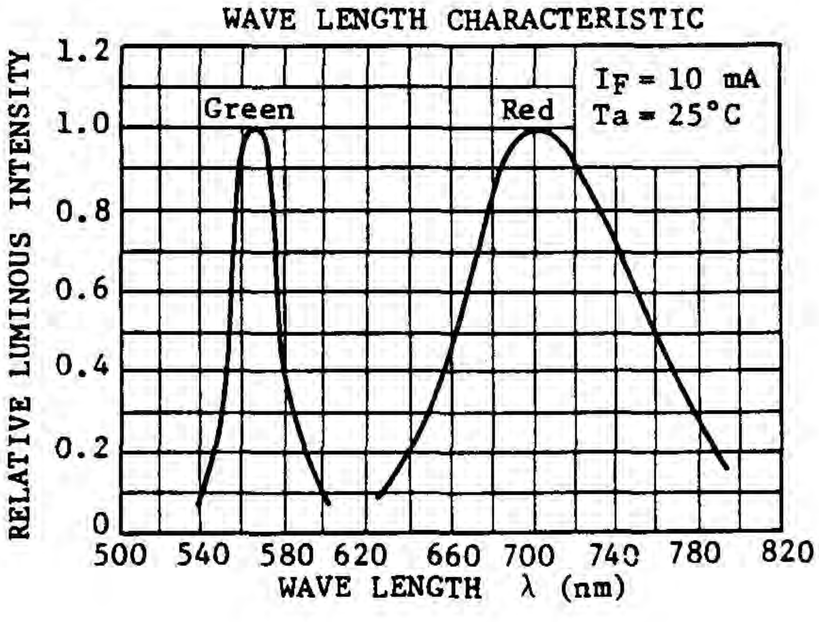
$I_F - V_F$

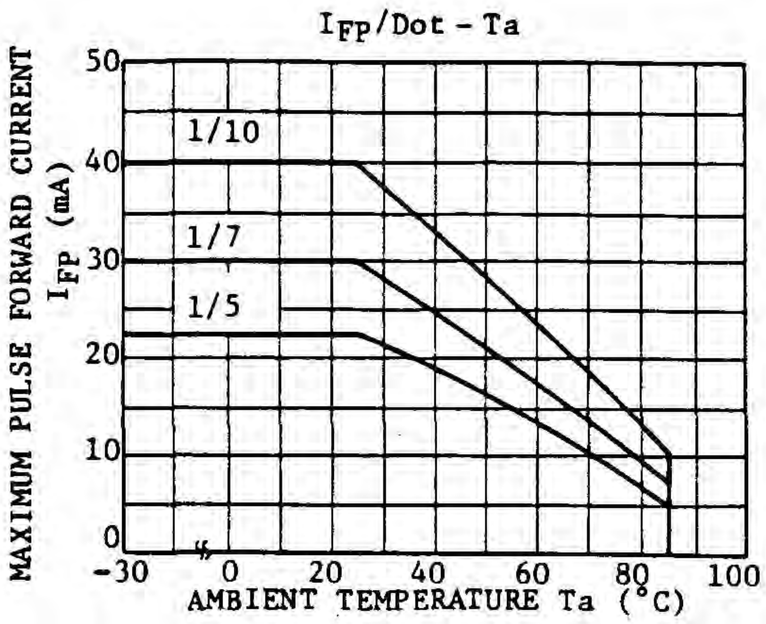


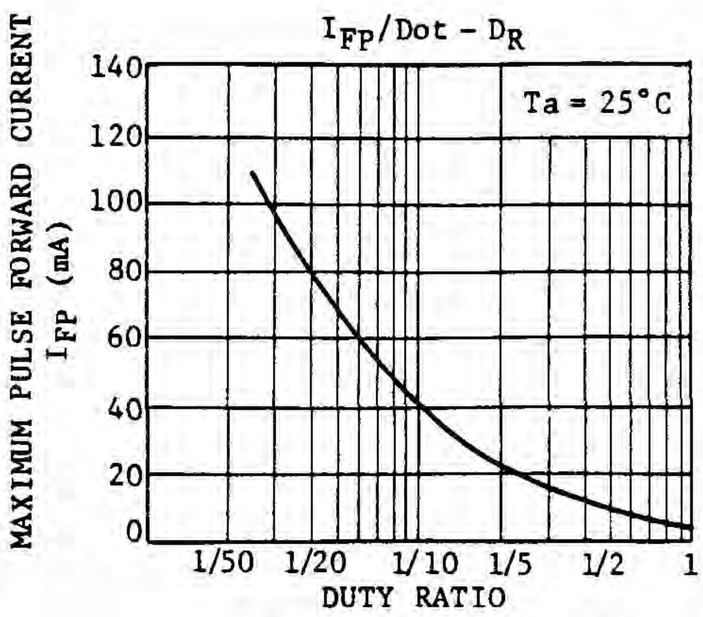
$I_V/Dot/I_F$



WAVE LENGTH CHARACTERISTIC

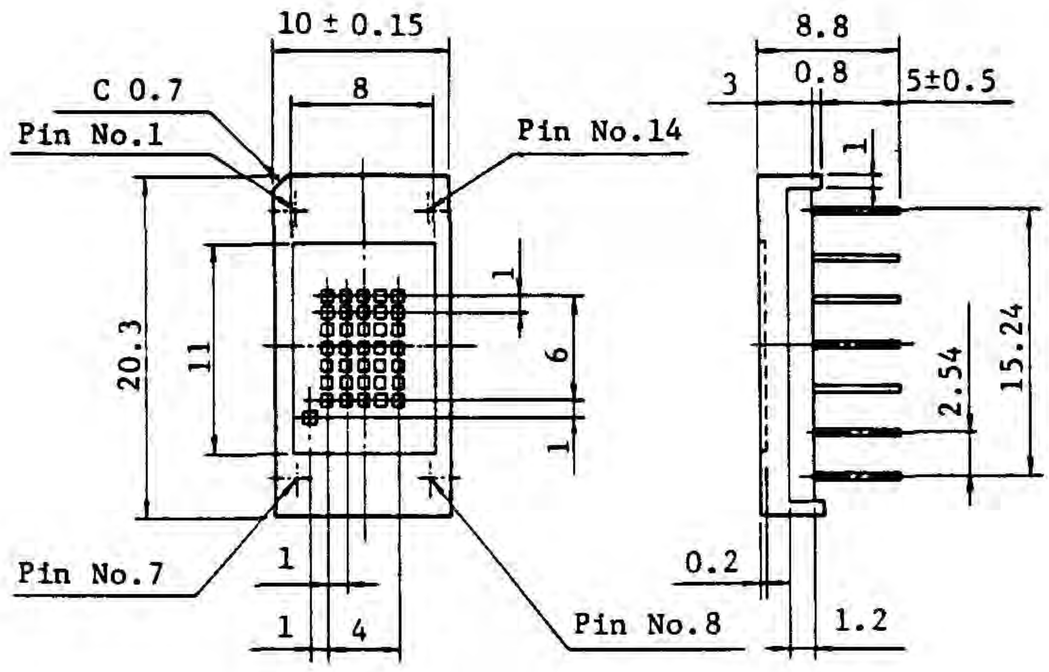


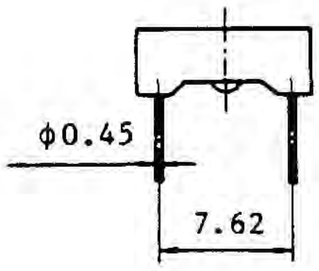




OUTLINE DIMENSIONS

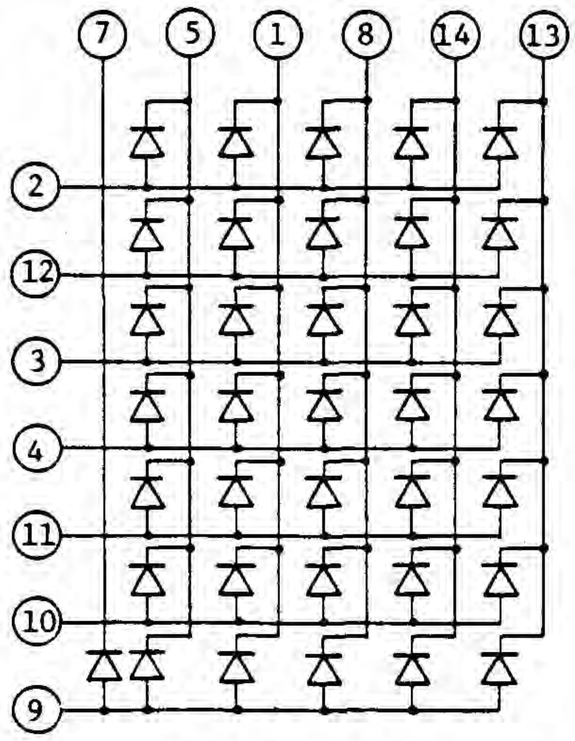
Unit: mm
Tolerance is ±0.25
Unless otherwise noted



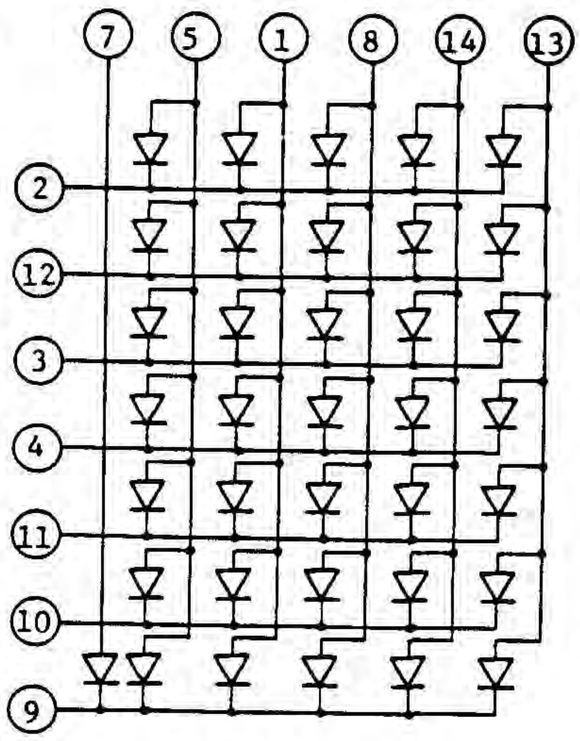


PIN CONNECTION

PIN NO.	CONNECTION TLR372 TLG372	CONNECTION TLR373 TLG373	PIN NO.	CONNECTION TLR372 TLG372	CONNECTION TLR373 TLG373
1	Column 2 Cathode	Column 2 Anode	8	Column 3 Cathode	Column 3 Anode
2	Row 1 Anode	Row 1 Cathode	9	Row 7 Anode	Row 7 Cathode
3	Row 3 Anode	Row 3 Cathode	10	Row 6 Anode	Row 6 Cathode
4	Row 4 Anode	Row 4 Cathode	11	Row 5 Anode	Row 5 Cathode
5	Column 1 Cathode	Column 1 Anode	12	Row 2 Anode	Row 2 Cathode
6	Omitted	Omitted	13	Column 5 Cathode	Column 5 Anode
7	Decimal Cathode	Decimal Anode	14	Column 4 Cathode	Column 4 Anode



(TLR372/TLG372)



(TLR373/TLG373)