

# LED LAMP ARRAYS

T-41-31

## MTG613A

### APPLICATIONS

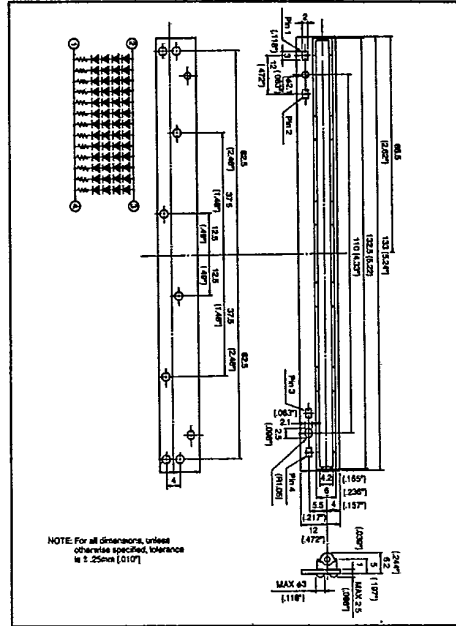
- COPIER
- SCANNERS
- FLORESCENT LAMP REPLACEMENT

### FEATURES

- Fast response time.
- Low power consumption.
- Available in GaAlAs 660nm ultra red.
- Available in illuminating lengths of 64mm to 303mm.

### MAXIMUM RATINGS (Ta = 25°C)

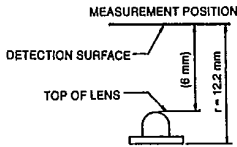
CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V <sub>DD</sub>	13.2	V
Reverse Voltage	V <sub>R</sub>	16	V
Operating Temperature	T <sub>opr</sub>	-10 ~ 60	°C
Storage Temperature	T <sub>stg</sub>	-20 ~ 65	°C



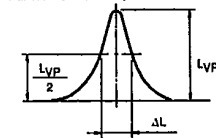
### OPTO-ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Current	I <sub>DD</sub>	V <sub>DD</sub> =12V	—	190	300	mA
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =16V	—	—	100	μA
Peak Luminosity	L <sub>yp</sub>	V <sub>DD</sub> =12V, r=12.2mm	1000	1500	—	lx
Illumination Matching	L <sub>VM</sub>	l = 105mm	—	—	± 20	%
Converging Half Band Width	ΔL	V <sub>DD</sub> =12V	—	2.1	—	mm
Peak Light Emission Wave Length	λ <sub>P</sub>	V <sub>DD</sub> =12V	—	567	—	nm
Spectral Half Band Width	Δλ	V <sub>DD</sub> =12V	—	25	—	nm

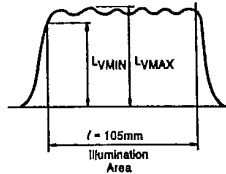
PEAK INTENSITY, DISTRIBUTION OF INTENSITY



PEAK ILLUMINATION, CONDENSING HALF WIDTH



PEAK ILLUMINATION, ILLUMINATION MATCHING



$$L_{yp} = \frac{1}{n} \sum_{i=1}^n L_{yp_i}$$

(n: measuring points)

$$L_{VM} = \left\{ \begin{array}{l} \frac{L_{yp_i \text{ MAX}} - L_{yp}}{L_{yp}} \times 100 \\ \frac{L_{yp_i \text{ MIN}} - L_{yp}}{L_{yp}} \times 100 \end{array} \right.$$