

LED LAMP ARRAYS

MTG813B

T-41-31

APPLICATIONS

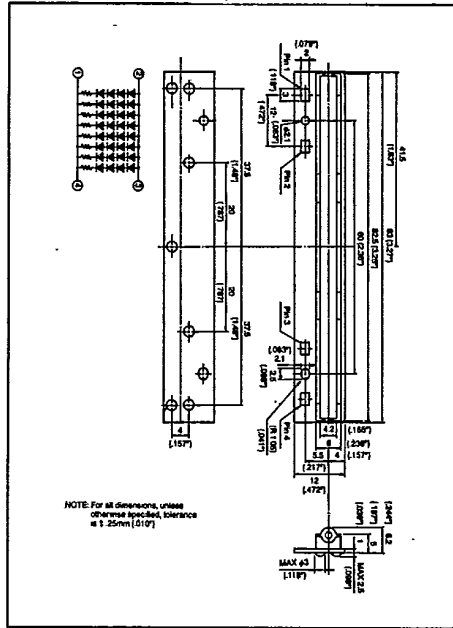
- COPIER
- SCANNERS
- FLORESCENT LAMP REPLACEMENT

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)

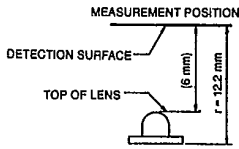
CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V _{DD}	13.2	V
Reverse Voltage	V _R	16	V
Operating Temperature	T _{opr}	-10 ~ 60	°C
Storage Temperature	T _{stg}	-20 ~ 65	°C



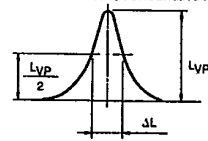
OPTO-ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Current	I _{DD}	V _{DD} =12V	—	120	200	mA
Reverse Current	I _R	V _R =16V	—	—	100	μA
Peak Luminosity	L _{VP}	V _{DD} =12V, r=12.2mm	1000	1500	—	lx
Illumination Matching	L _{VM}	ℓ = 64mm	—	—	± 20	%
Converging Half Band Width	ΔL	V _{DD} =12V	—	2.1	—	mm
Peak Light Emission Wave Length	λ _P	V _{DD} =12V	—	567	—	nm
Spectral Half Band Width	Δλ	V _{DD} =12V	—	25	—	nm

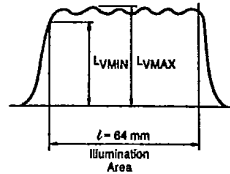
PEAK INTENSITY, DISTRIBUTION OF INTENSITY



PEAK ILLUMINATION, CONDENSING HALF WIDTH



PEAK ILLUMINATION, ILLUMINATION MATCHING



$$L_{VP} = \frac{1}{n} \sum_{i=1}^n L_{VPi}$$

(n: measuring points)

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