

EL - 1ML2

The EL - 1ML2, a high - power GaAs IRED mounted in a TO - 18 type header with clear epoxy encapsulation, has wide beam angle and is relatively low - cost compared to TO - 18 can - type devices.

FEATURES

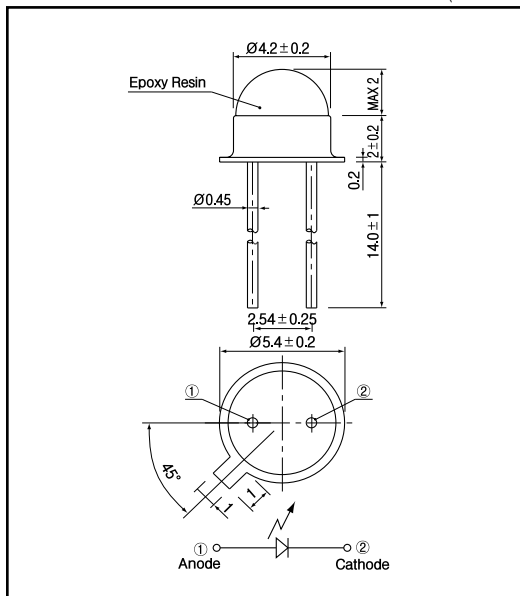
- Wide beam angle
- Relative low cost against metal can package
- Low profile package

APPLICATIONS

- Optical switches
- Encoders
- Optical readers

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

Item	Symbol	Rating	Unit
Reverse voltage	V _R	5	V
Forward current	I _F	100	mA
Pulse forward current *1	I _{FP}	1	A
Power dissipation	P _D	170	mW
Operating temp.	T _{opr.}	- 25 - + 100	
Storage temp.	T _{stg.}	- 25 - + 100	
Soldering temp. *2	T _{sol.}	260	

*1. pulse width : tw 100 ꝑec.period : T=10msec.

*2. For MAX.5 seconds at the position of 2 mm from the package

ELECTRO-OPTICAL CHARACTERISTICS

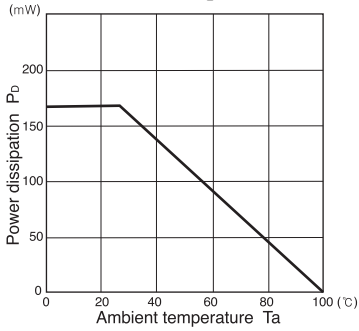
(Ta=25)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Forward voltage	V _F	I _F =50mA		1.2	1.5	V
Reverse current	I _R	V _R =5V			10	µA
Capacitance	C _t	f=1MHz		25		pF
Radiant intensity	P _o	I _F =50mA		2.7		mW/sr
Peak emission wavelength	ꝑ	I _F =50mA		940		nm
Spectral bandwidth 50%		I _F =50mA		50		nm
Half angle				± 32		deg.

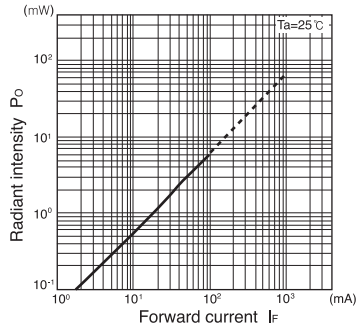
Infrared Emitting Diodes(GaAs)

EL - 1 ML2

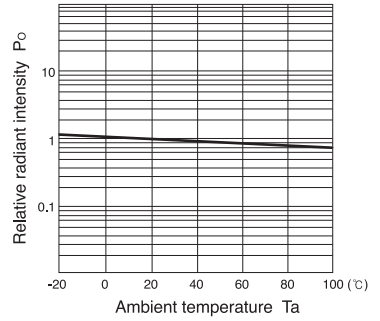
Power dissipation Vs. Ambient temperature



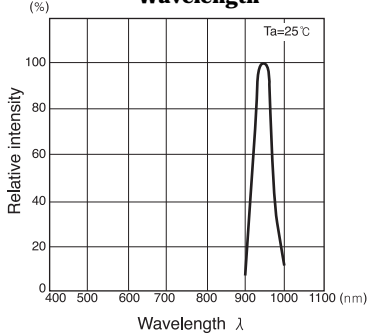
Radiant intensity Vs. Forward current



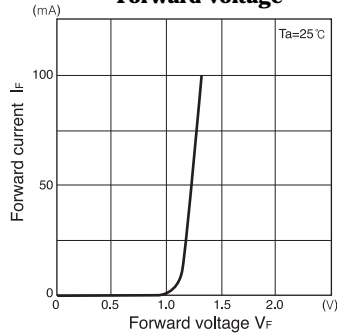
Relative radiant intensity Vs. Ambient temperature



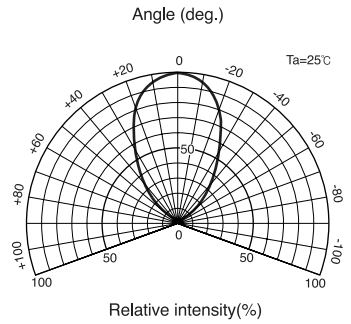
Relative intensity Vs. Wavelength



Forward current vs. Forward voltage



Radiant Pattern



Relative radiant intensity Vs. Distance

