

ML - 1CL3

The ML - 1CL3 is a high - power GaAlAs IRED mounted in a $\varnothing 3$ ceramic package.

FEATURES

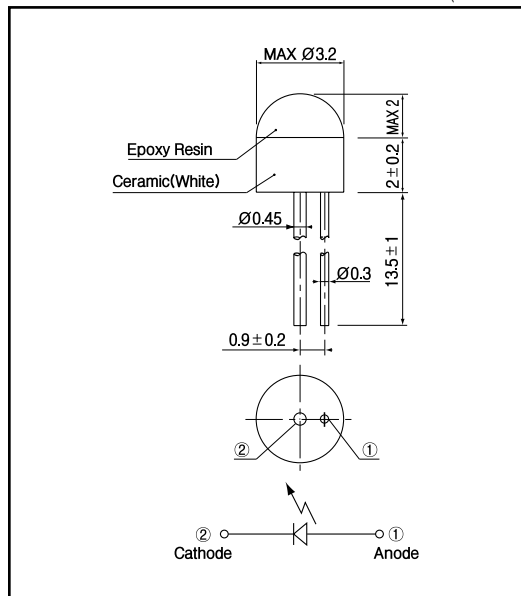
- $\varnothing 3$ ceramic base
- Peak emission wavelength $\lambda = 865\text{nm}$
- Wide beam angle $\pm 53\text{deg}$.

APPLICATIONS

- Optical switches
- Encoders
- OA

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

($T_a = 25^\circ\text{C}$)

Item	Symbol	Rating	Unit
Reverse voltage	V_R	3	V
Forward current	I_F	50	mA
Power dissipation	P_D	80	mW
Pulse forward current ¹⁾	I_{FP}	0.5	A
Operating temp.	$T_{opr.}$	- 20 + 70	
Storage temp.	$T_{stg.}$	- 20 + 80	
Soldering temp. ²⁾	$T_{sol.}$	240	

¹⁾ pulse width : $t_w \leq 100 \mu\text{sec}$, period : $T = 10\text{msec}$.

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

ELECTRO-OPTICAL CHARACTERISTICS

($T_a = 25^\circ\text{C}$)

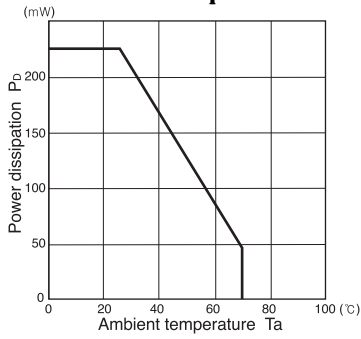
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Forward voltage	V_F	$I_F = 50\text{mA}$		1.4	1.7	V
Reverse current	I_R	$V_R = 3\text{V}$			10	μA
Peak emission wavelength	λ	$I_F = 20\text{mA}$		865		nm
Spectral bandwidth		$I_F = 20\text{mA}$		30		nm
Radiant intensity ³⁾	P_0	$I_F = 20\text{mA}$	50			mV
Half angle				± 53		deg.

³⁾ Measured by tester of KODENSHI CORP.

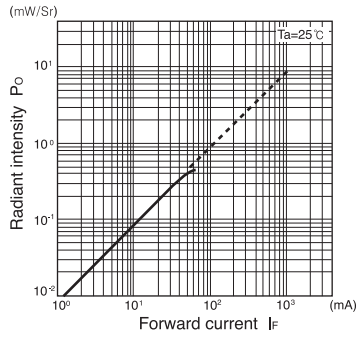
Infrared Emitting Diodes(GaAlAs)

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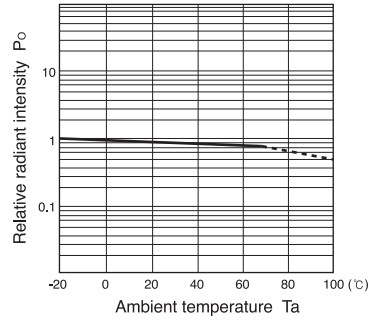
Power dissipation Vs. Ambient temperature



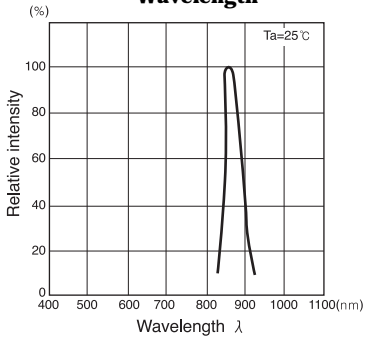
Radiant intensity Vs. Forward current



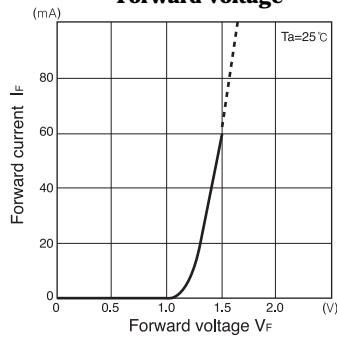
Relative radiant intensity Vs. Ambient temperature



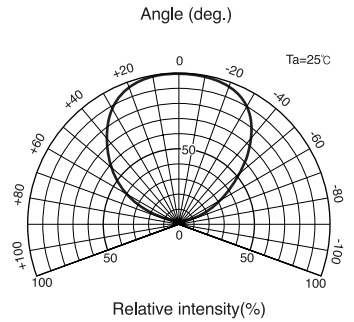
Relative intensity Vs. Wavelength



Forward current Vs. Forward voltage



Radiant Pattern



Relative radiant intensity Vs. Distance

