

EL - 55L

The EL - 55L is a high - power GaAs IRED mounted in a clear plastic package. This LED emits infrared light through two plastic lenses on both sides of the package is ideally suited for use with VTR tape - end sensors.

FEATURES

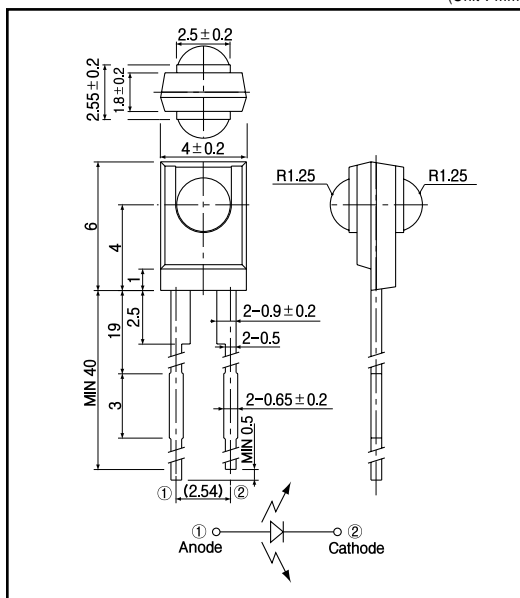
- Compact
- Low profile package
- Low - cost
- Sidelooking plastic package
- Long - lead type

APPLICATIONS

- VTR type - end sensor

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

($T_a=25$)

Item	Symbol	Rating	Unit
Reverse voltage	V_R	5	V
Forward current	I_F	50	mA
Pulse forward current *1	I_{FP}	1	A
Power dissipation	P_D	75	mW
Operating temp.	$T_{opr.}$	- 25 ~ + 85	
Storage temp.	$T_{stg.}$	- 30 ~ + 85	
Soldering temp. *2	$T_{sol.}$	260	

*1. pulse width : t_w 100 μ sec, period : $T=10$ msec.

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

ELECTRO-OPTICAL CHARACTERISTICS

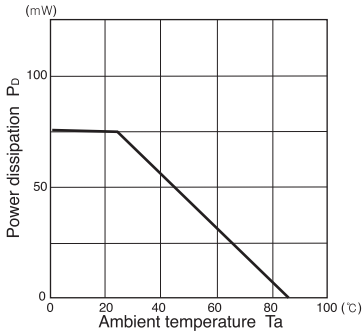
($T_a=25$)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Forward voltage	V_F	$I_F=50$ mA		1.3	1.5	V
Reverse current	I_R	$V_R=5$ V			10	μ A
Capacitance	C_t	$f=1$ MHz		25		pF
Radiant intensity	P_c	$I_F=20$ mA	0.7	2.0		mW/sr
Peak emission wavelength	λ	$I_F=20$ mA		940		nm
Spectral bandwidth 50%		$I_F=20$ mA		50		nm
Half angle			-	-	-	deg.

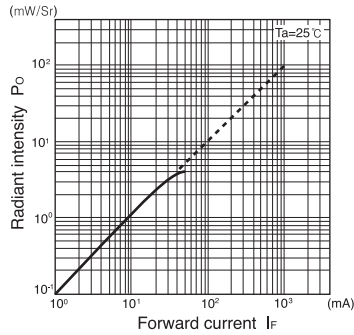
Infrared Emitting Diodes(GaAs)

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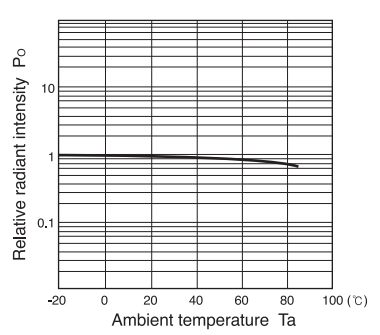
Power dissipation Vs. Ambient temperature



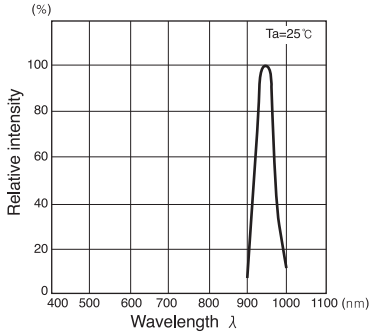
Radiant intensity Vs. Forward current



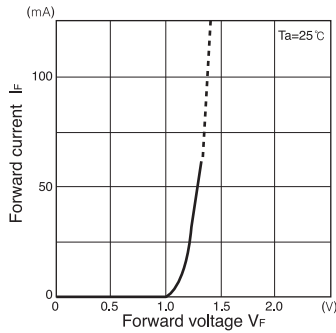
Relative radiant intensity Vs. Ambient temperature



Relative intensity Vs. Wavelength



Forward current vs. Forward voltage



Radiant Pattern

