

Infrared Emitting Diodes(GaAs)

KODENSHI

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

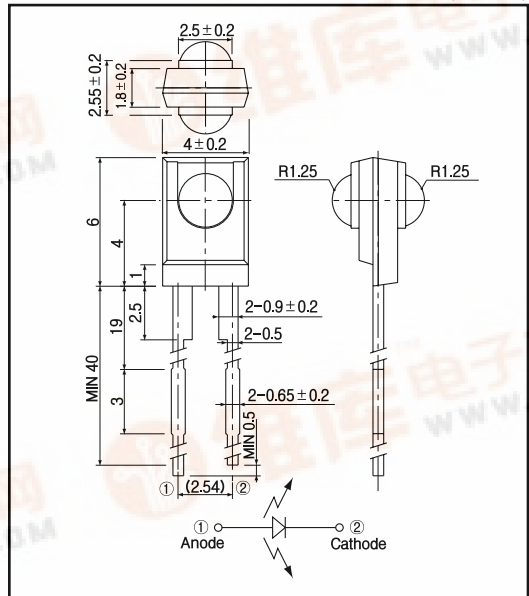
- Compact
- Low profile package
- Low - cost
- Sidelooking plastic package
- Long - lead type

APPLICATIONS

- VTR type - end sensor

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=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 _o	75	mW
Operating temp.	Topr.	- 25 ~ + 85	
Storage temp.	Tstg.	- 30 ~ + 85	
Soldering temp. ²⁾	Tsol.	260	

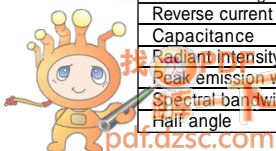
*1. pulse width : tw 100 µsec.period : T=10msec.

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

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25)

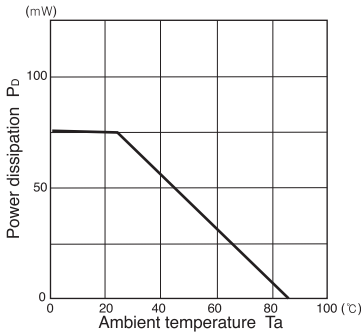
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Forward voltage	V _f	I _f =50mA		1.3	1.5	V
Reverse current	I _r	V _r =5V			10	µA
Capacitance	C _t	f=1MHz		25		pF
Radiant intensity	P _o	I _f =20mA	0.7	2.0		mW/sr
Peak emission wavelength	p	I _f =20mA		940		nm
Spectral bandwidth 50%		I _f =20mA		50		nm
Half angle			-	-	-	deg.



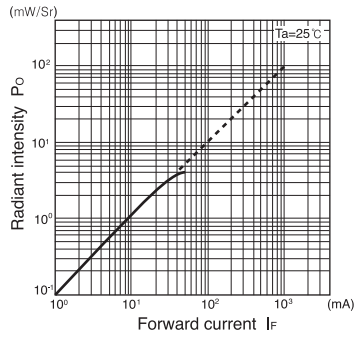
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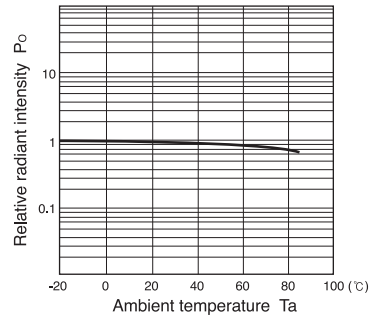
Power dissipation Vs. Ambient temperature



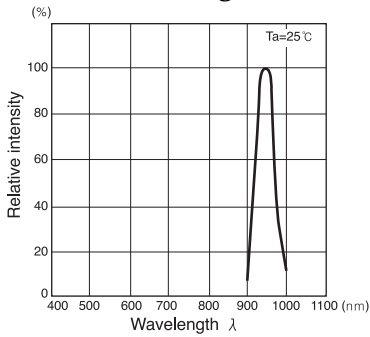
Radiant intensity Vs. Forward current



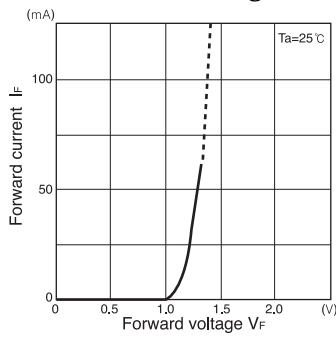
Relative radiant intensity Vs. Ambient temperature



Relative intensity Vs. Wavelength



Forward current vs. Forward voltage



Radiant Pattern

