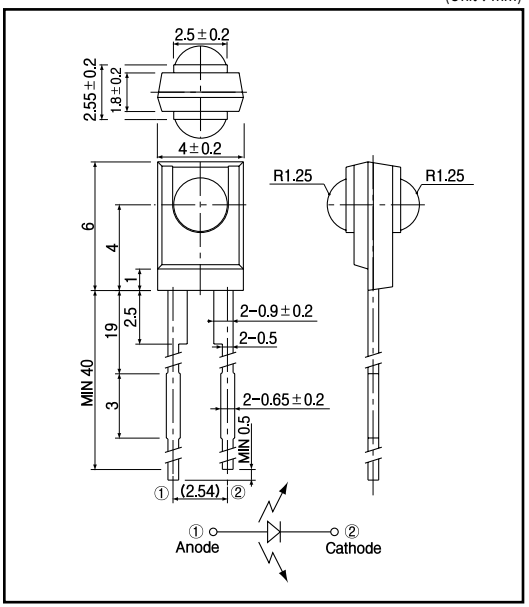
KEL55L

The KEL55L 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.

DIMENSIONS (Unit : mm)



FEATURES

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

APPLICATIONS

- VTR type - end sensor

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_D	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	Ct	f=1MHz		25		pF
Radiant intensity	P_O	I_F=20mA	0.7	2.0		mW/sr
Peak emission wavelength	λp	I_F=20mA		940		nm
Spectral bandwidth 50%	Δλ	I_F=20mA		50		nm
Half angle	△θ		-	-	-	deg.

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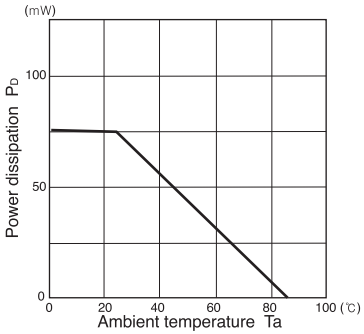
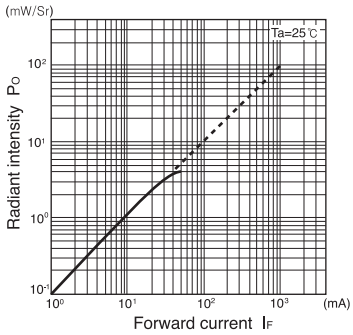
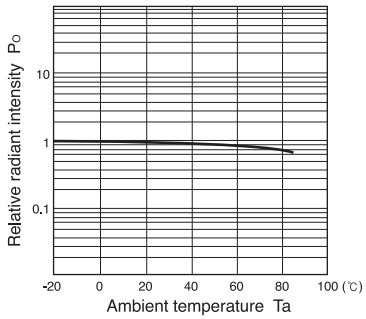
Power dissipation Vs. Ambient temperature



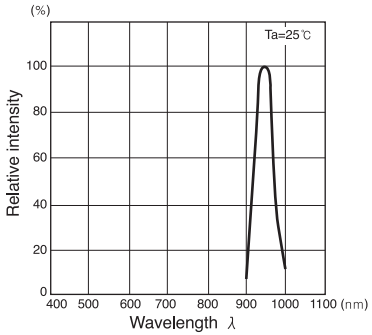
Radiant intensity Vs. Forward current



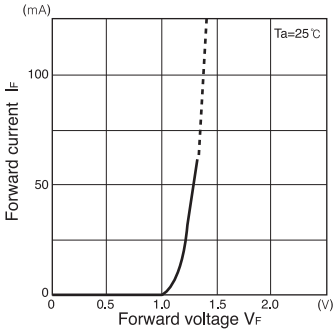
Relative radiant intensity Vs. Ambient temperature



Relative intensity Vs. Wavelength



Forward current vs. Forward voltage



Radiant Pattern