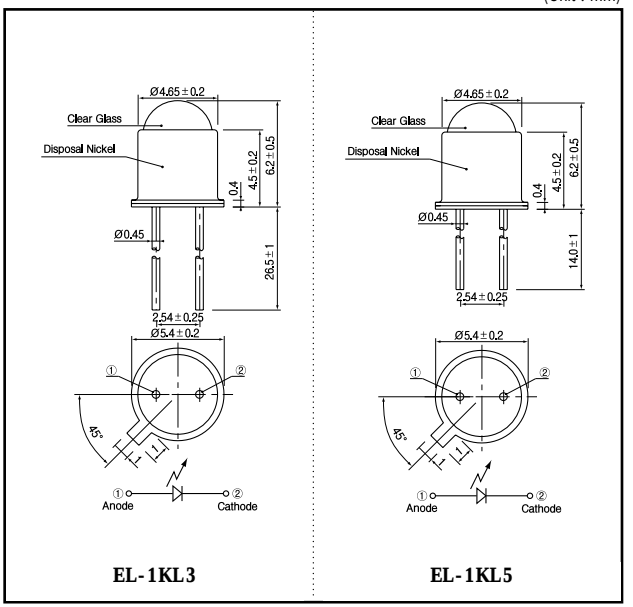
EL - 1KL3 · EL - 1KL5

The EL - 1KL3 and 1KL5 are high - power GaAs IREDs mounted in durable, hermetically sealed TO - 18 metal can package, which provides years of reliable performance even under demanding conditions such as use outdoors.

FEATURES
- Narrow beam angle
- Durable
- High reliability in demanding environments

APPLICATIONS
- Optical emitters
- Optical switches
- Encoders
- Smoke sensors

DIMENSIONS (Unit : mm)



EL-1KL3 EL-1KL5

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_C	170	mW
Operating temp.	Topr.	-40~+100	℃
Storage temp.	Tstg.	-55~+125	℃
Soldering temp. *2	Tsol.	260	℃

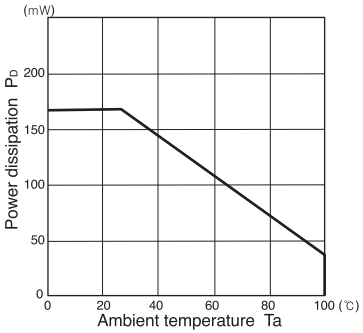
*1. pulse width : tw ≦100 μsec.period : T=10msec.
*2. For MAX.5 seconds at the position of 2 mm from the package

ELECTRO-OPTICAL CHARACTERISTICS (Ta=25℃)

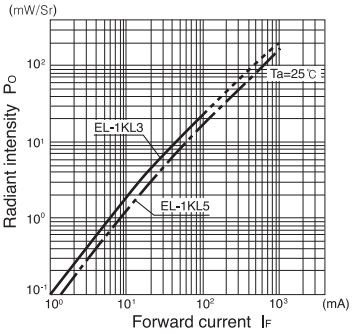
Item	Symbol	Conditions	EL - 1KL3			EL - 1KL5			Unit.
			Min.	Typ.	Max.	Min.	Typ.	Max.	
Forward voltage	V_F	I_F=100mA		1.35	1.7		1.35	1.7	V
Reverse current	I_R	V_R=5V			10			10	μA
Capacitance	Ct	f=1MHz		25			25		pF
Radiant intensity	P_O	I_F=100mA		15			10		mW/sr
Peak emission wavelength	λp	I_F=100mA		940			940		nm
Spectral bandwidth 50%	Δλ	I_F=100mA		50			50		nm
Half angle	△θ			±8			±5		deg.

EL - 1KL3 · EL - 1KL5

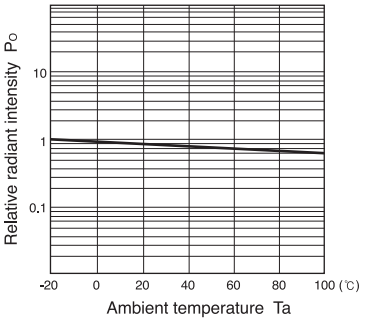
Power dissipation Vs. Ambient temperature



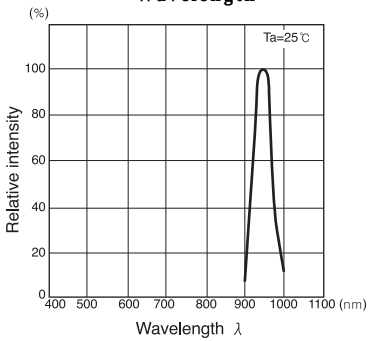
Radiant intensity Vs. Forward current



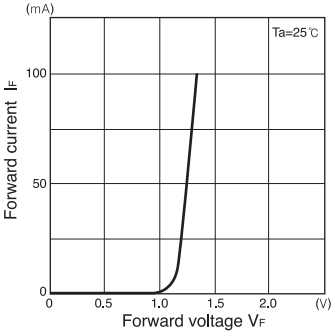
Relative radiant intensity Vs. Ambient temperature



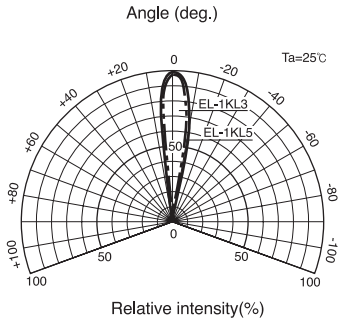
Relative intensity Vs. Wavelength



Forward current Vs. Forward voltage



Radiant Pattern



Relative radiant intensity Vs. Distance

