

## EL - 316

The EL - 316 is a high - power GaAs IRED mounted in a clear epoxy package.

**FEATURES**

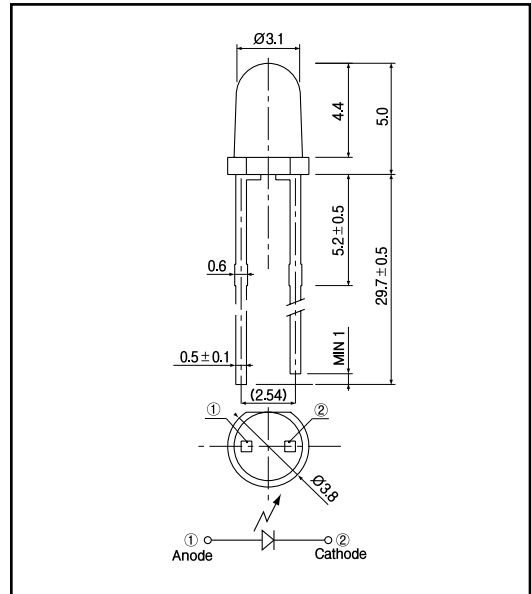
- $\phi 3$  casting mold type
- High output power

**APPLICATIONS**

- VTR
- Optical remote controllers
- Transmission sensors

**DIMENSIONS**

(Unit : mm)

**MAXIMUM RATINGS**

(Ta=25 °C)

Item	Symbol	Rating	Unit
Reverse voltage	$V_R$	4	V
Forward current	$I_F$	60	mA
Power dissipation	$P_D$	80	mW
Pulse forward current <sup>*1</sup>	$I_{FP}$	0.5	A
Operating temp.	$T_{opr.}$	- 25 + 80	
Storage temp.	$T_{stg.}$	- 40 + 85	
Soldering temp. <sup>*2</sup>	$T_{sol.}$	240	

\*1. pulse width :  $t_w$  100  $\mu$ sec.period :  $T=10$ msec.

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

**ELECTRO-OPTICAL CHARACTERISTICS**

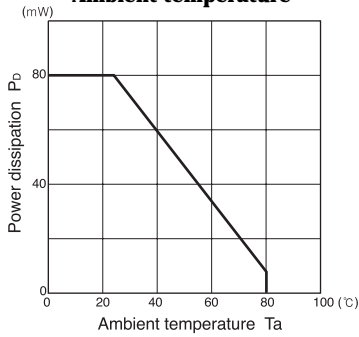
(Ta=25 °C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Forward voltage	$V_F$	$I_F=40$ mA		1.2	1.5	V
Reverse current	$I_R$	$V_R=4$ V			10	$\mu$ A
Peak emission wavelength	$\lambda_p$	$I_F=40$ mA		940		nm
Spectral bandwidth		$I_F=40$ mA		50		nm
Radiant intensity	$PO$	$I_F=40$ mA	10	20		mW/sr
Half angle				$\pm 17$		deg.

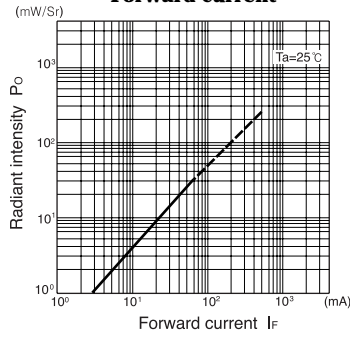
# Infrared Emitting Diodes(GaAs)

EL - 316

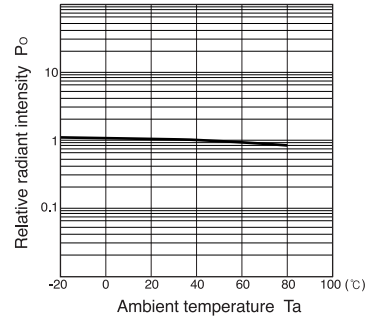
**Power dissipation Vs. Ambient temperature**



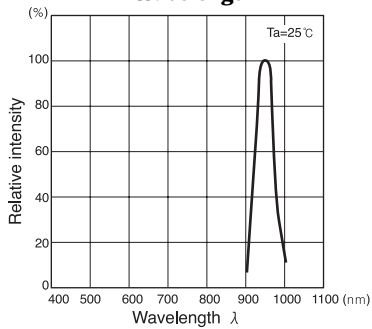
**Radiant intensity Vs. Forward current**



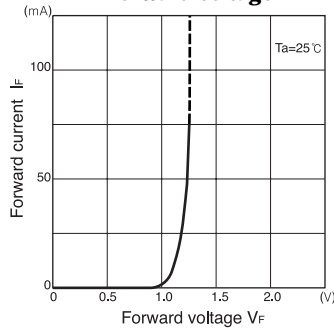
**Relative radiant intensity Vs. Ambient temperature**



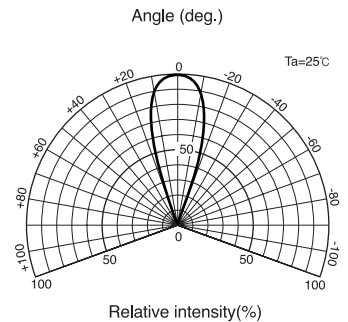
**Relative intensity Vs. Wavelength**



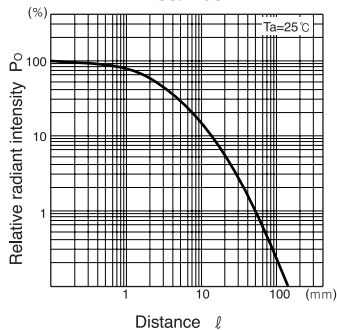
**Forward current vs. Forward voltage**



**Radiant Pattern**



**Relative radiant intensity Vs. Distance**



**Relative radiant intensity Vs. Distance test method**

