

EL333

The EL333 is a Double-end Type IR Emtting Diode mounted in a compact clear package.

EL333 is compact size and easy to mount on small space.

Features

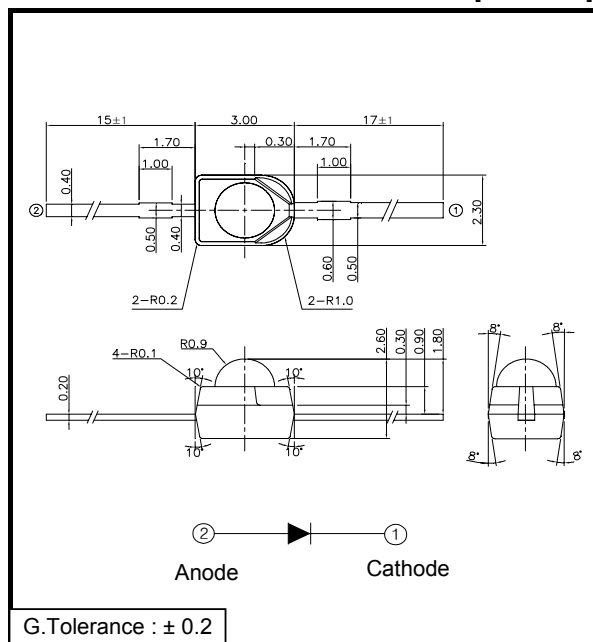
- Compact package with double-end leads
- Clear plastic package
- RoHS Compliant

Applications

- Photointerrupter
- Optical switches
- Transmission sensor

Dimensions

[Unit : mm]



Absolute Maximum Ratings

[Ta = 25°C]

Parameter	Symbol	Rating	Unit
Forward Current	I_F	50	mA
Reverse Voltage	V_R	5	V
Pulse Forward Current ^{*1}	I_{FP}	1	A
Power Dissipation	P_D	75	mW
Operating Temperature	$T_{opr.}$	-25~ + 85	°C
Storage Temperature	$T_{stg.}$	-30~ + 80	°C
Soldering Temperature ^{*2}	T_{sol}	260	°C

*1. Pulse width $t_w=100\mu\text{sec}$, cycle $T=10\text{msec}$

*2. Distance from end of the package =2mm, time=5sec, Max.

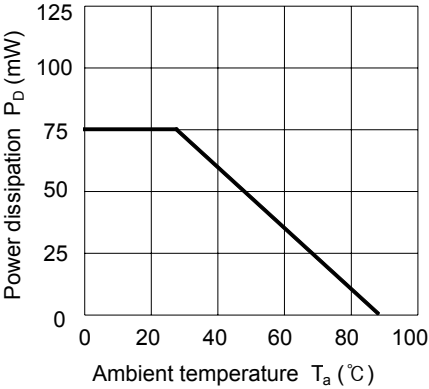
Electro-Optical Characteristics

[Ta = 25°C]

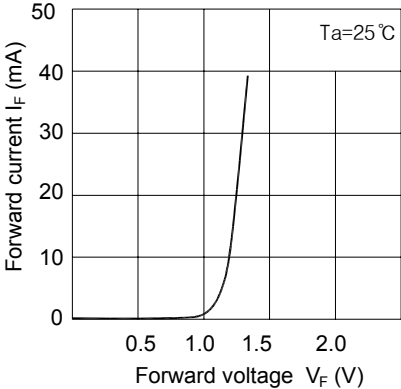
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Forward Voltage	V_F	$I_F=50\text{mA}$	-	1.2	1.5	V
Reverse Current	I_R	$V_R=5\text{V}$	-	-	10	μA
Capacitance	C_T	$f=1\text{MHz}$	-	25	-	pF
Radiant intensity	P_O	$I_F=20\text{mA}$	0.8	-	-	mV
Peak Wavelength	λ_p	$I_F=20\text{mA}$	-	940	-	nm
Spectral Width at FWHM	$\Delta\lambda$	$I_F=20\text{mA}$	-	50	-	nm
Half Angle	$\Delta\theta$		-	± 20	-	degrees

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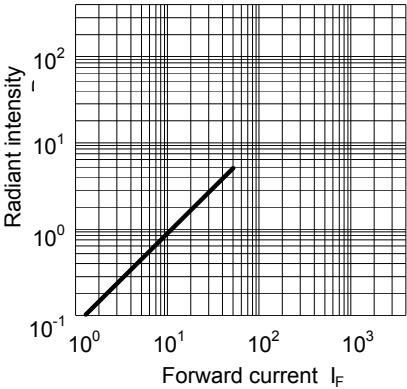
Power dissipation Vs. Ambient temperature



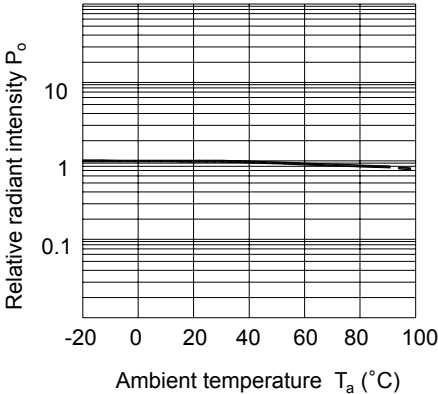
Forward current Vs. Forward voltage



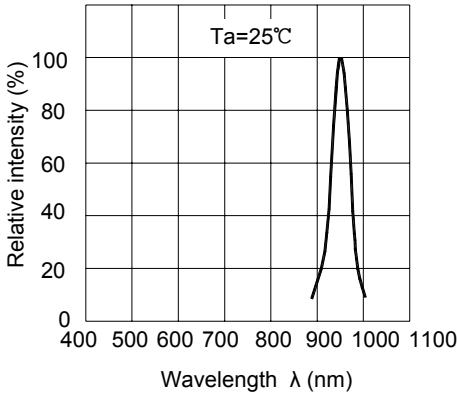
Radiant intensity Vs. Forward current



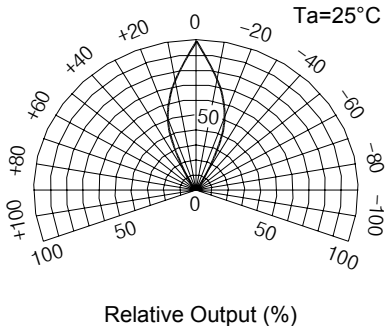
Relative radiant intensity Vs. Ambient temperature



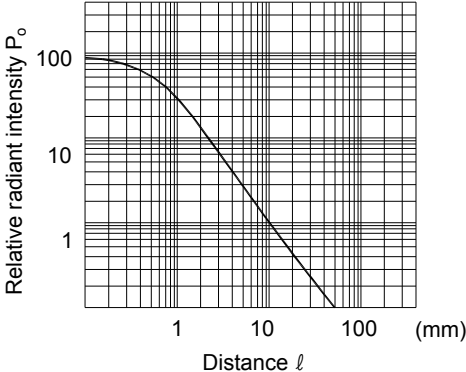
Relative intensity Vs. Wavelength



Sensitivity Diagram Angular Displacement



Relative Radiant intensity Vs. Distance



Relative radiant intensity Vs. Distance test method

