EVERCOLOR

承　　認　　書

SPECIFICATION FOR APPROVAL

客　　戶
Customer

機　　種
Machinery

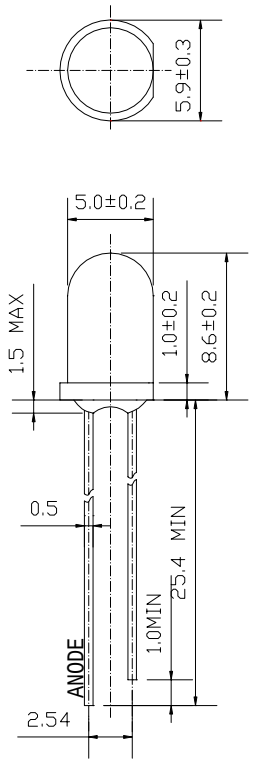
品　　名
Description　333HRD-T

編　　號
No.

承　　認　　書　　簽　　章 APPROVED SIGNATURES		

EVERCOLOR OPTO ELECTRONICS CO., LTD

Package Dimensions:

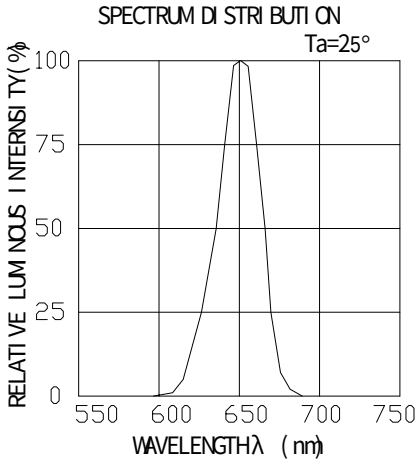


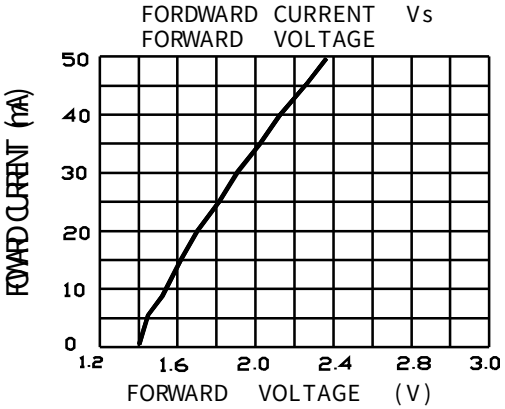
PART NO	CHIP		Lens Color
	Material	Emitted Color	
333HRD-T	GaAlAs	Red	Red Diffused

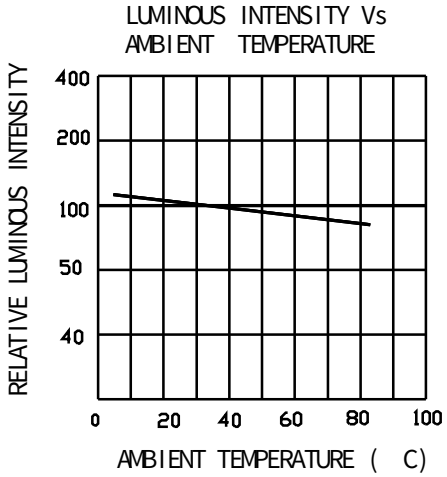
Notes:

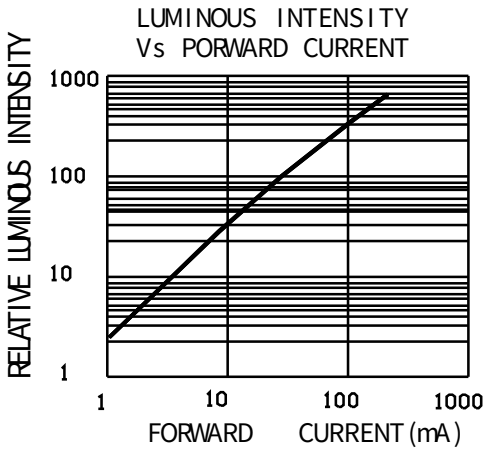
- All dimensions are in millimeters(inches).
- Tolerance is ±0.25(.010”)mm unless otherwise noted.
- Protuded resin under flange is 1.0mm(.04”)max.
- Lead spacing is measured where the leads emerge from the package.
- Specifications are subject to change without notice.
- The LED lamps are availabe with diffrerent colors,intensities,epoxy colors,etc.

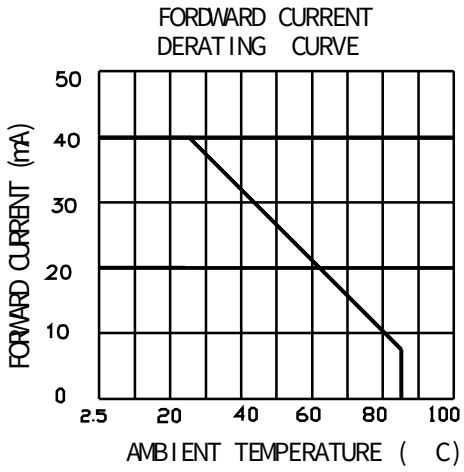
CHARACTERISTIC CURVES:

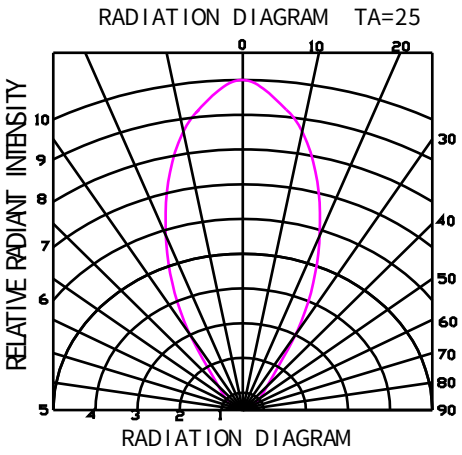












ABSOLUTE MAXIMUM RATINGS(at TA=25℃):

Parameter	Symbol	Min.	Max.	Unit
Forward Current	I_F		30	mA
Peak Forward Current	I_{FP}*		160	mA
Reverse Voltage	V_R		5	V
Operating Temperature	$T_{opr.}$	-40	+85	℃
Storage Temperature	$T_{stg.}$	-40	+85	℃
Power Dissipation	P_D		100	mW

*Pulse width :Max.10ms,Duty ratio:Max 1/10

Electrical/Optical Characteristies(at TA=25℃)

Parameter	Condition	Unit	Min.	Typ.	Max.
Forward Voltage VF	I_F=20mA	V	1.7	2.1	2.4
Reverse Current IR	V_R=5V	uA			10
Viewing Angle	I_F=20mA	2θ1/2		40	
Dominant Wavelength	I_F=20mA	nm		650	
λ_D					
Spectrum width of half	I_F=20mA	nm		30	
value△λ					
Luminous Intensity IV	I_F=20mA	mcd	100	150	

RELIABILITY TEST ITEM AND CONDITION:

NO	ITEM	TEST CONDITIONS	TEST Hours/Cycle	Sample Size	Ac/Re
1	Soldering Heat	TEMP:260℃±5℃	10±1 SEC	76 Pcs	0/1
2	Solderability	TEMP:260℃±5℃	10±1 SEC	76 Pcs	0/1
3	Temperature Cycle	H:+85℃ 30min ∫ 5 min L:-55℃ 30min	50 CYCLE	76 Pcs	0/1
4	Thermal Shock	H:+85℃ 30min ∫ 5 min L:-55℃ 30min	50 CYCLE	76 Pcs	0/1
5	High Temperature Storage	TEMP:100℃	1000HRS	76 Pcs	0/1
6	Low Temperature Storage	TEMP:-55℃	1000HRS	76 Pcs	0/1
7	DC Operating Life	IF=20mA	1000HRS	76 Pcs	0/1
8	High temperature/ High Humidity	85℃/85% RH	1000HRS	76 Pcs	0/1