

Technical Data Sheet**7383/R1C3-ALPA/AM****Features**

- Popular T-1 3/4 diameter package.
- Choice of various viewing angles.
- Available on tape and reel.
- Reliable and robust.
- ESD-withstand voltage: up to 2kv acc. To JESD22-A114-B
- The product itself will remain within RoHS compliant version.

**Descriptions**

- The series is specially designed for applications requiring higher brightness.
- The LED lamps are available with different colors, intensities, epoxy colors, etc.

Applications

- Status indicators.
- Commercial use.
- Advertising Signs.
- Signs and Signals
- Automotive lighting.

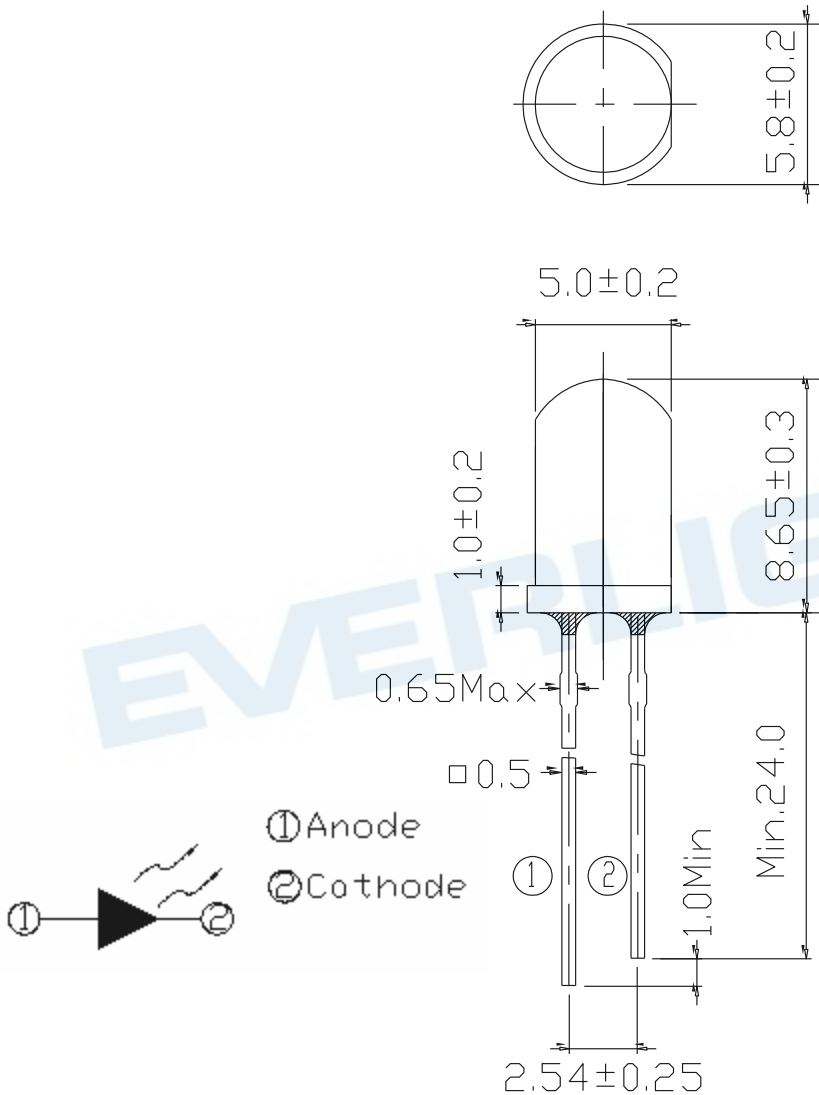
Device Selection Guide

Chip		Lens Color
Material	Emitted Color	
AlGaInP	Brilliant Red	Water clear

Technical Data Sheet

7383/R1C3-ALPA/AM

Package Dimensions



Notes:

- All dimensions are in millimeters, tolerance is 0.25mm except being specified.
- Lead spacing is measured where the lead emerges from the package.

Technical Data Sheet

7383/R1C3-ALPA/AM

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Units
Forward Current	I _F	50	mA
Pulse Forward Current ^{*1}	I _{FP}	100	mA
Operating Temperature	T _{opr}	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C
Soldering Temperature ^{*2}	T _{sol}	260 ±5	°C
Power Dissipation	P _d	120	mW
Reverse Voltage	V _R	12	V

Notes: *1:I_{FP} Conditions--Pulse Width ≤ 10msec and Duty ≤ 1/10.

*2:Soldering time ≤ 5 seconds.

Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Forward Voltage	V _F	I _F =20mA	1.6	2.0	2.4	V
Luminous Intensity	I _v		1425	2250	3600	mcd
Viewing Angle	2θ 1/2		--	30	--	deg
Peak Wavelength	λ _p		--	632	--	nm
Dominant Wavelength	λ _d		620	624	628	nm
Spectrum Radiation Bandwidth	Δλ		--	20	--	nm
Reverse Current	I _R	V _R =12V	--	--	10	μA



Technical Data Sheet

7383/R1C3-ALPA/AM

Rank Combination (I_F=20mA)

Rank	L	M	N	P
Luminous Intensity	1425~1850	1800~2250	2250~2850	2850~3600

*Measurement Uncertainty of Luminous Intensity: ±15% Unit:mcd

Rank	0	1	2	3
Forward Voltage	1.6~1.8	1.8~2.0	2.0~2.2	2.2~2.4

*Measurement Uncertainty of Forward Voltage: ±0.1V Unit:V

Rank	1	2
Dominant Wavelength	620~624	624~628

*Measurement Uncertainty of Dominant Wavelength ±1.0nm Unit:nm

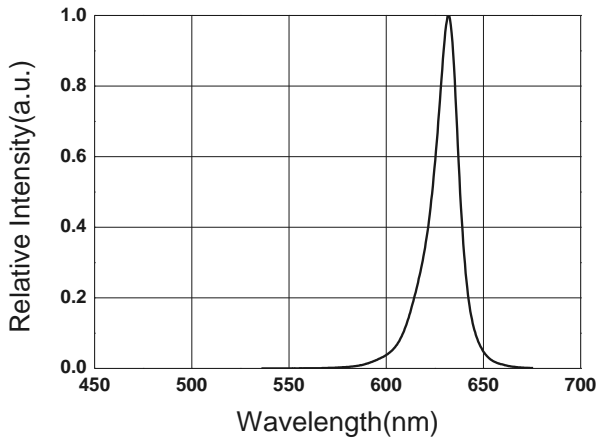


Technical Data Sheet

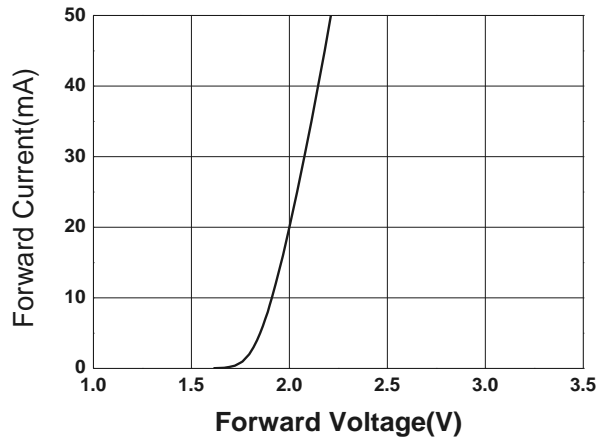
7383/R1C3-ALPA/AM

Typical Electro-Optical Characteristics Curves

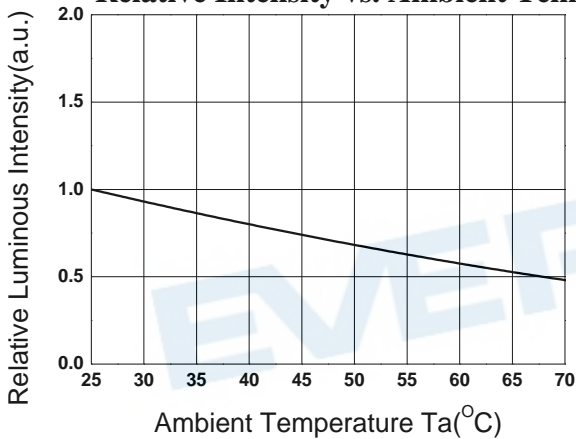
Relative Intensity vs. Wavelength



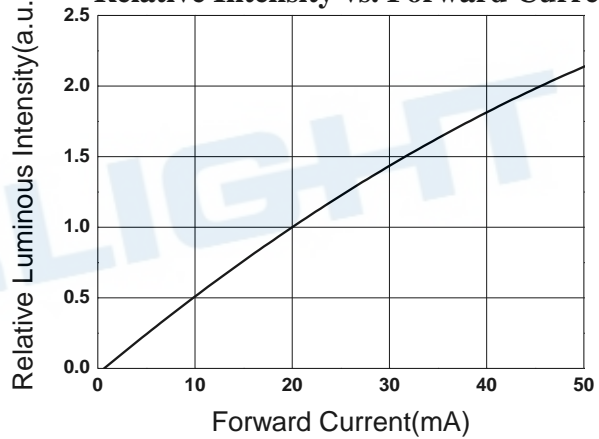
Forward Current vs. Forward Voltage



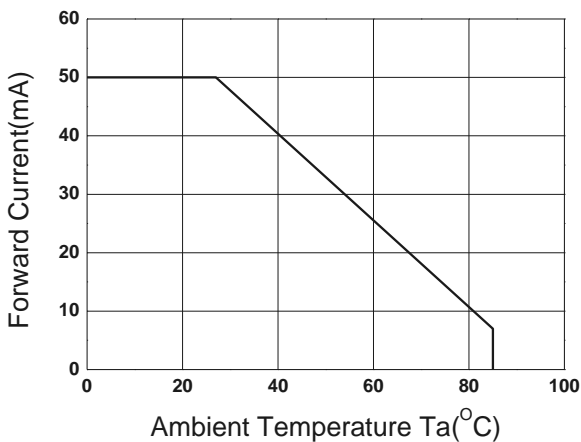
Relative Intensity vs. Ambient Temp.



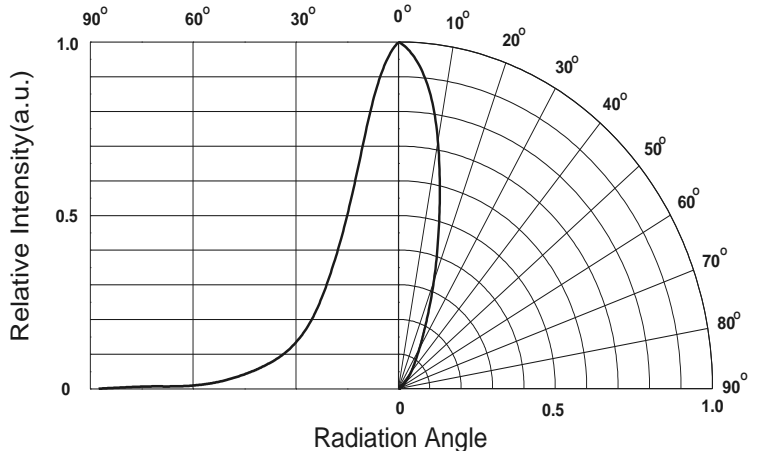
Relative Intensity vs. Forward Current



Forward Current vs. Ambient Temp.



Radiation Characteristics







Technical Data Sheet

7383/R1C3-ALPA/AM

Packing Quantity Specification

1.500PCS/1Bag, 5Bags/1Box
2.10Boxes/1Carton

Label Form Specification

EVERLIGHT	
CPN:	
P/N:	
	RoHS
7383/R1C3-ALPA/AM	
QTY :	CAT:
	HUE:
LOT NO :	REF:
	
MADE IN TAIWAN	

CPN: Customer's Production Number
P/N : Production Number
QTY: Packing Quantity
CAT: Ranks of Luminous Intensity and Forward Voltage
HUE: Rank of Dominant Wavelength
REF: Reference
LOT No: Lot Number
MADE IN TAIWAN: Production Place





Technical Data Sheet

7383/R1C3-ALPA/AM

Notes

1. Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification.
2. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. EVERLIGHT assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
3. These specification sheets include materials protected under copyright of EVERLIGHT corporation. Please don't reproduce or cause anyone to reproduce them without EVERLIGHT's consent.
4. Soldering Condition

Careful attention should be paid during soldering. When soldering, leave more than 3mm from solder joint to case, and soldering beyond the base of the tie bar is recommended.

Avoiding applying any stress to the lead frame while the LEDs are at high temperature particularly when soldering.

Recommended soldering conditions:

Hand Soldering		DIP Soldering	
Temp. at tip of iron	400°C Max. (30W Max.)	Preheat temp.	100°C Max. (60 sec Max.)
Soldering time	3 sec Max.	Bath temp.	265 Max.
Distance	3mm Min.(From solder joint to case)	Bath time.	5 sec Max.
		Distance	3mm Min.

EVERLIGHT ELECTRONICS CO., LTD.
 Office: No 25, Lane 76, Sec 3, Chung Yang Rd,
 Tucheng, Taipei 236, Taiwan, R.O.C

Tel: 886-2-2267-2000, 2267-9936
 Fax: 886-2267-6244, 2267-6189, 2267-6306
<http://www.everlight.com>