



Technical Data Sheet

7383/V7C3-ARTA/R/MS

Features

- Popular T-1 3/4 diameter package.
- Choice of various viewing angles.
- Available on tape and reel.
- Reliable and robust.
- UV resistant epoxy
- 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

- Color Graphic Signs
- Message boards
- Variable message signs (VMS)
- Commercial outdoor advertising

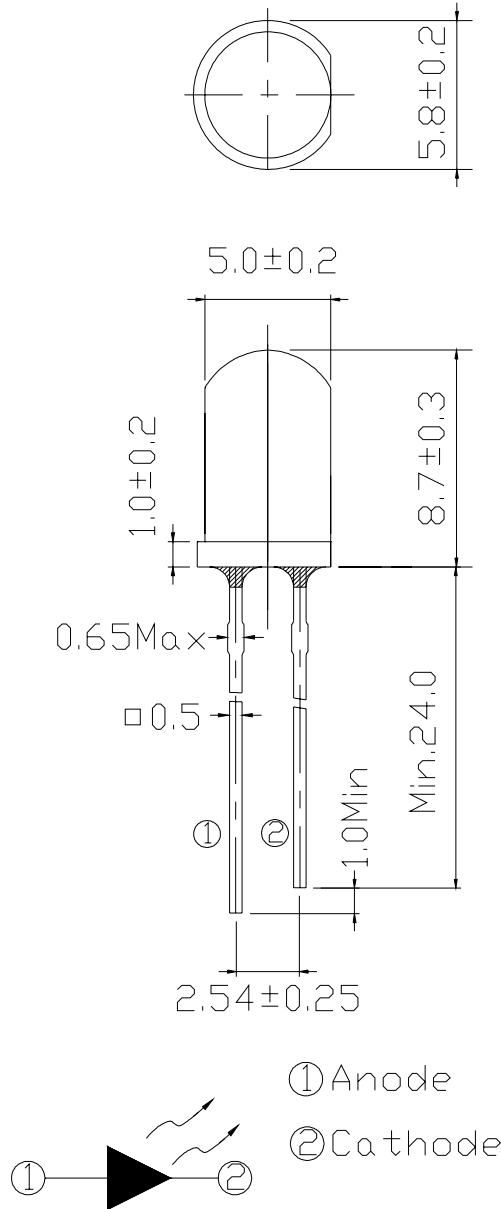
Device Selection Guide

Chip Material	Emitted Color	Lens Color
InGaN	Bluish Green	Water Clear

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Package Dimensions



Notes:

- All dimensions are in millimeters, tolerance is 0.25mm except being specified.
- Protruded resin under flange is 1.5mm Max LED.



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7383/V7C3-ARTA/R/MS**Absolute Maximum Ratings (Ta=25)**

Parameter	Symbol	Rating	Units
Forward Current	I _F	30	mA
Pulse Forward Current ^{*1}	I _{FP}	100	mA
Operating Temperature	T _{opr}	-40 ~ +85	
Storage Temperature	T _{stg}	-40 ~ +100	
Electrostatic Discharge	ESD	1K	V
Soldering Temperature ^{*2}	T _{sol}	260 ±5	
Power Dissipation	P _d	120	mW
Reverse Voltage	V _R	5	V

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

*2:Soldering time 5 seconds.

Electro-Optical Characteristics (Ta=25)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Forward Voltage	V _F	I _F =20mA	2.8	3.2	3.6	V
Luminous Intensity	I _V	I _F =20mA	4500	6300	9000	mcd
Viewing Angle	2 1/2	I _F =20mA	--	30	--	deg
Peak Wavelength	p	I _F =20mA	--	502	--	nm
Dominant Wavelength	d	I _F =20mA	498	505	513	nm
Spectrum Radiation Bandwidth		I _F =20mA	--	25	--	nm
Reverse Current	I _R	V _R =5V	--	--	50	μ A

**Technical Data Sheet****7383/V7C3-ARTA/R/MS****Rank Combination ($I_F=20\text{mA}$)**

Rank	R	S	T
Luminous Intensity	4500~5650	5650~7150	7150~9000

*Measurement Uncertainty of Luminous Intensity: $\pm 15\%$

Unit: :mcd

Rank	0	1	2	3
Forward Voltage	2.8~3.0	3.0~3.2	3.2~3.4	3.4~3.6

*Measurement Uncertainty of Forward Voltage: $\pm 0.1\text{V}$

Unit:V

Rank	2	3	4
Dominant Wavelength	498~503	503~508	508~513

*Measurement Uncertainty of Dominant Wavelength $\pm 1.0\text{nm}$

Unit:nm

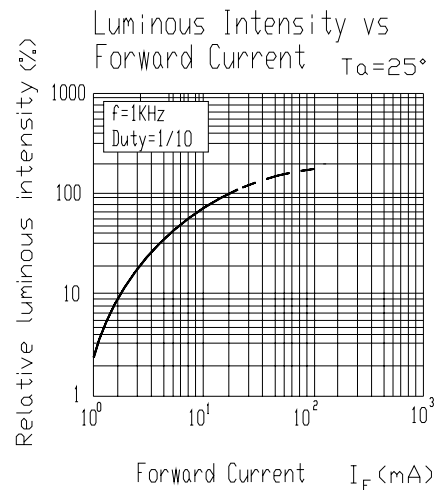
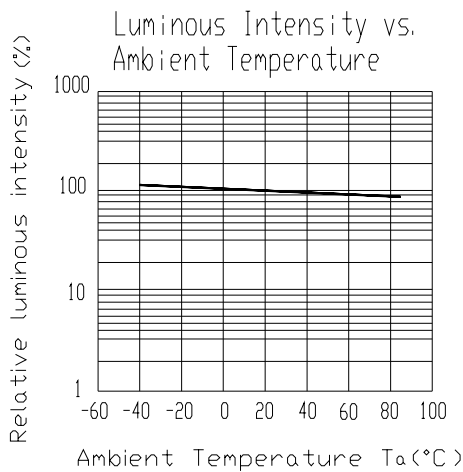
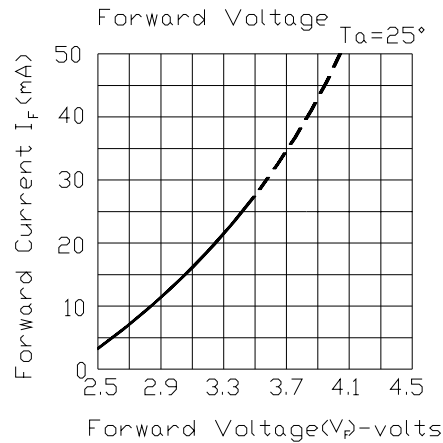
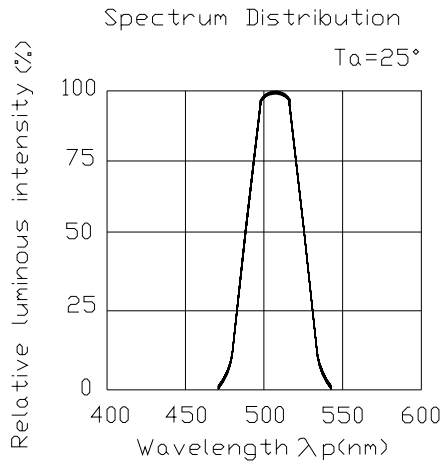
*The quantity ratio of the ranks is decided by EVERLIGHT.



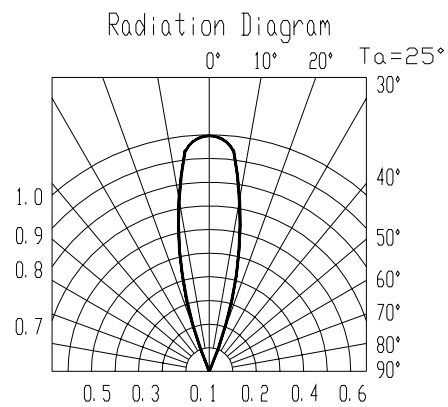
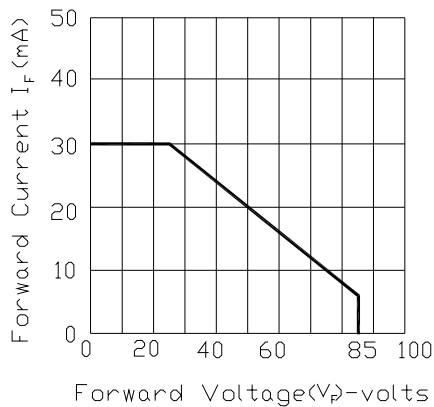
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Typical Electro-Optical Characteristics Curves



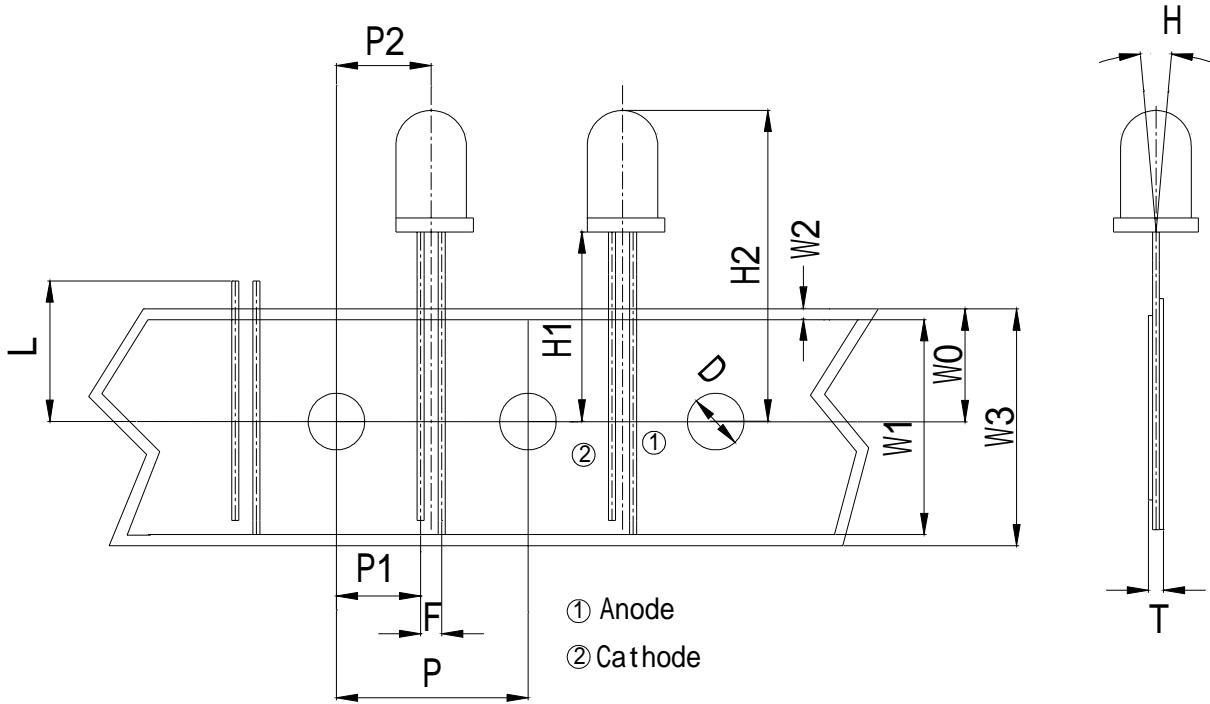
Forward Current Derating Curve



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Taping Dimensions



**Technical Data Sheet****7383/V7C3-ARTA/R/MS****Taping Sizes**

Symbol Item	Symbol	Specifications		
		Avg		Tolerance
		Mm	Inch	mm
Tape Feed Hold Diameter	D	4.0	0.157	±0.2
Component Lead Pitch	F	2.54	0.100	+0.8/-0.2
Front-To-Rear Deflection	ΔH	0°	0	±5°
Feed Hole To Button Of Component	H1	18.5	0.729	±1.0
Feed Hole To Overall Component Height	H2	27.2	1.072	±1.0
Lead Length After Component Height	L	11.0	0.433	Max
Feed Hold Pitch	P	12.7	0.500	±0.3
Lead Location	P1	5.10	0.200	±0.7
Center Of Component Location	P2	6.35	0.250	±1.2
Overall Taped Package Thickness	T	1.42	0.056	Max
Feed Hold Location	W0	9.0	0.354	±0.5
Adhesive Tape Width	W1	13.0	0.512	±0.25
Adhesive Tape Position	W2	4.0	0.157	Max
Tape Width	W3	18.0	0.709	±0.75




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Packing Quantity Specification

- 1.2000PCS/1Bag
- 2.10Bags/1Carton

Label Form Specification

EVERLIGHT	
CPN:	
P/N:	
7383/V7C3-ARTA/R/MS	
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



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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.
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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 Max. (30W Max.)	Preheat temp.	100 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.

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