# 

# DATASHEET

# EADCF040RA5



### Features :

- Industrial standard size.
- Low power consumption.
- Categorized for luminous intensity.
- Pb free
- The product itself will remain within RoHS compliant version

### Descriptions :

- The EADCF040 series is a large 10.16 mm (0.4")high seven segment display designed for viewing distances up to 7 meters.
- These displays provide excellent reliability in bright ambient light.
- These devices are made with white segments and black surface.



Applications :

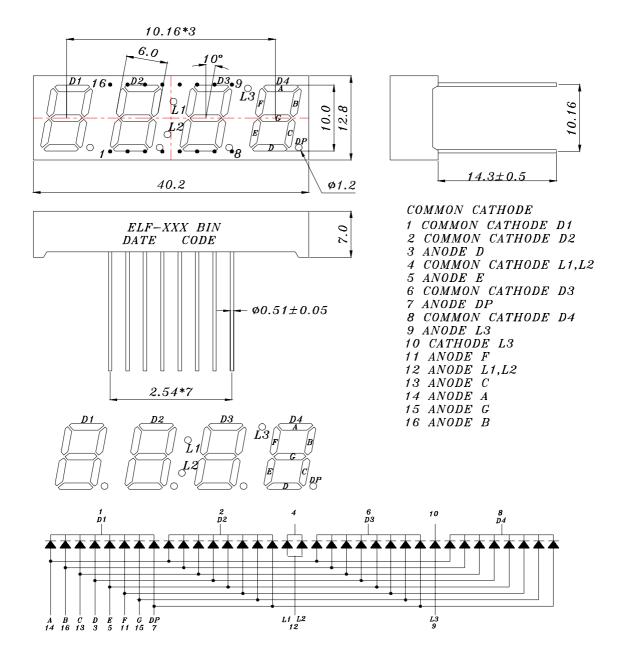
• Audio equipment

- Instrument panels
- Digital read out display

PART NO.	Chip		
PARI NO.	Material	Emitted Color	
EADCF040RA5	AlGaInP	Brilliant Red	



### Package Dimensions



- Notes: 1.All dimensions are in millimeters, tolerance is 0.25mm unless otherwise noted.
  - 2. Above specification may be changed without notice.

Supplier will reserve authority on material change for above specification.

Parameter	Symbol	Rating	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	25	mA
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +100	°C
Soldering Temperature *	Tsol	$260 \pm 5$	°C
Electrostatic Discharge	ESD	2000	V
Power Dissipation	Pd	60	mW

Absolute maximum ratings at  $Ta = 25^{\circ}C$ :

Note: \*Soldering time  $\leq$  5 seconds.

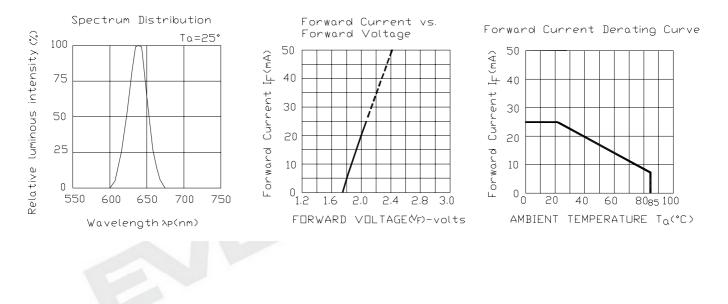
Electronic optical characteristics :

Parameter		Symbol	Min.	Тур.	Max.	Unit	Condition	
Luminous Intensity	Per segment	Iv		2.5		mcd	IF=2mA	
			5.6	12.5		mcd	IF=10mA	
	Per decimal point			0.8		mcd	IF=2mA	
			1.2	2.8		mcd	IF=10mA	
Peak Wavelength		λp		632		nm	IF=2mA	
Dominant Wavelength		λd		624		nm	IF=20mA	
Spectrum Radiation Bandwidth		$ riangle \lambda$		20		nm	IF=20mA	
Forward Voltage		VF		2.0	2.4	2.4 V IF=2		
Reverse Current		IR			100	μA	VR=5V	



Typical Electro-Optical Characteristic Curves:

# (SUR)



## Reliability test items and conditions:

The reliability of products shall be satisfied with items listed below.

Confidence level: 97%

LTPD: 3%

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Failure Judgment Criteria	Ac/Re
1	Solder Heat	TEMP: $260^{\circ}C \pm 5^{\circ}C$	5 SEC	76 PCS		0/1
2	Temperature Cycle	H : +85°C 30min ∫ 5 min L : -55°C 30min	50 CYCLE	76 PCS		0/1
3	Thermal Shock	H : +100°C 5min ∫ 10 sec L : -10°C 5min	50 CYCLE	76 PCS	Iv≦Ivt*0.5	0/1
4	High Temperature Storage	TEMP : 100°C	1000 HRS	76 PCS	or Vf≧U or	0/1
5	Low Temperature Storage	TEMP : -55°C	1000 HRS	76 PCS	Vf≦L	0/1
6	DC Operating Life	IF = 10 mA	1000 HRS	76 PCS		0/1
7	High Temperature / High Humidity	85℃/85% RH	1000 HRS	76 PCS		0/1

Note: Ivt: The test Iv value of the chip before the reliablility test

Iv : The test value of the chip that has completed the reliablility test

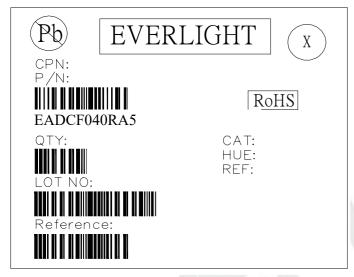
- U: Upper Specification Limit
- L: Lower Specification Limit



## Packing Quantity Specification

- 1. 12PCS/tube, 28 tubes/box
- 2. 4Boxes/Carton

### Label Form Specification



CPN: Customer's Production Number P/N : Production Number QTY: Packing Quantity CAT: Ranks HUE: Dominant Wavelength REF: Reference LOT No: Lot Number Reference:Volume label code

### 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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