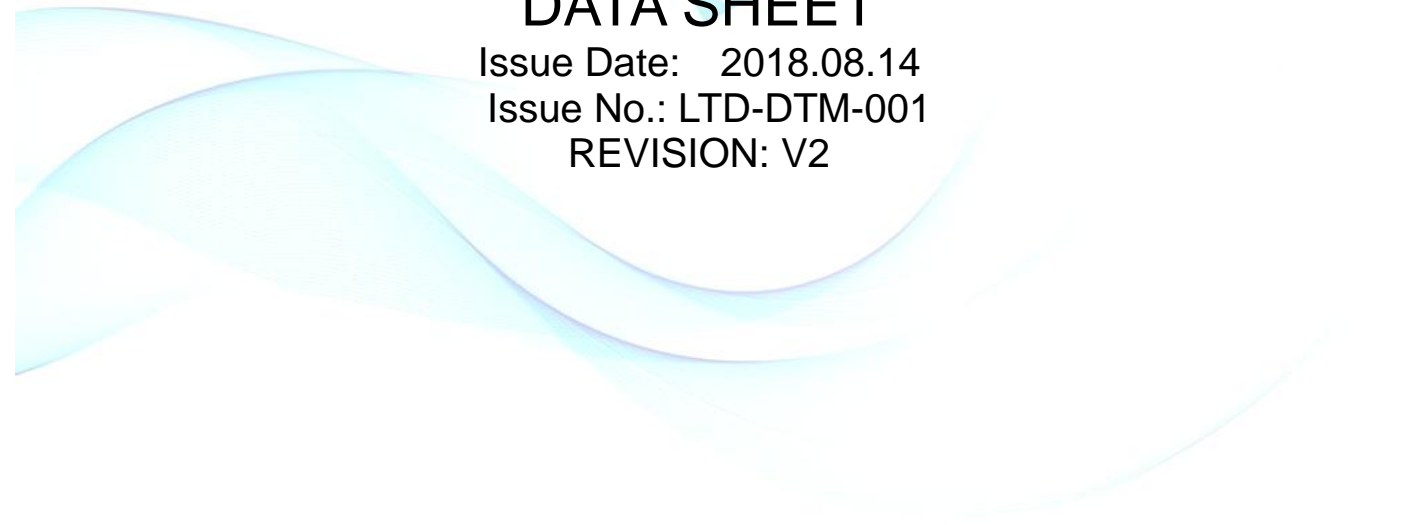


Customer Approved
Date:

Model No.:
LF4518R-01

DATA SHEET

Issue Date: 2018.08.14
Issue No.: LTD-DTM-001
REVISION: V2



Designer	Checker	Approver
<i>Allen</i>		

1、Products General Information:

Part No.	Chip Material	Color	Fabrication	Polarity	Dimension(mm)
LJ2016BR-3	AlGaInP	Red	Sealant	Common Cathode	34.25*15.2*12.0

2、Products Parameter Range at 25°C:

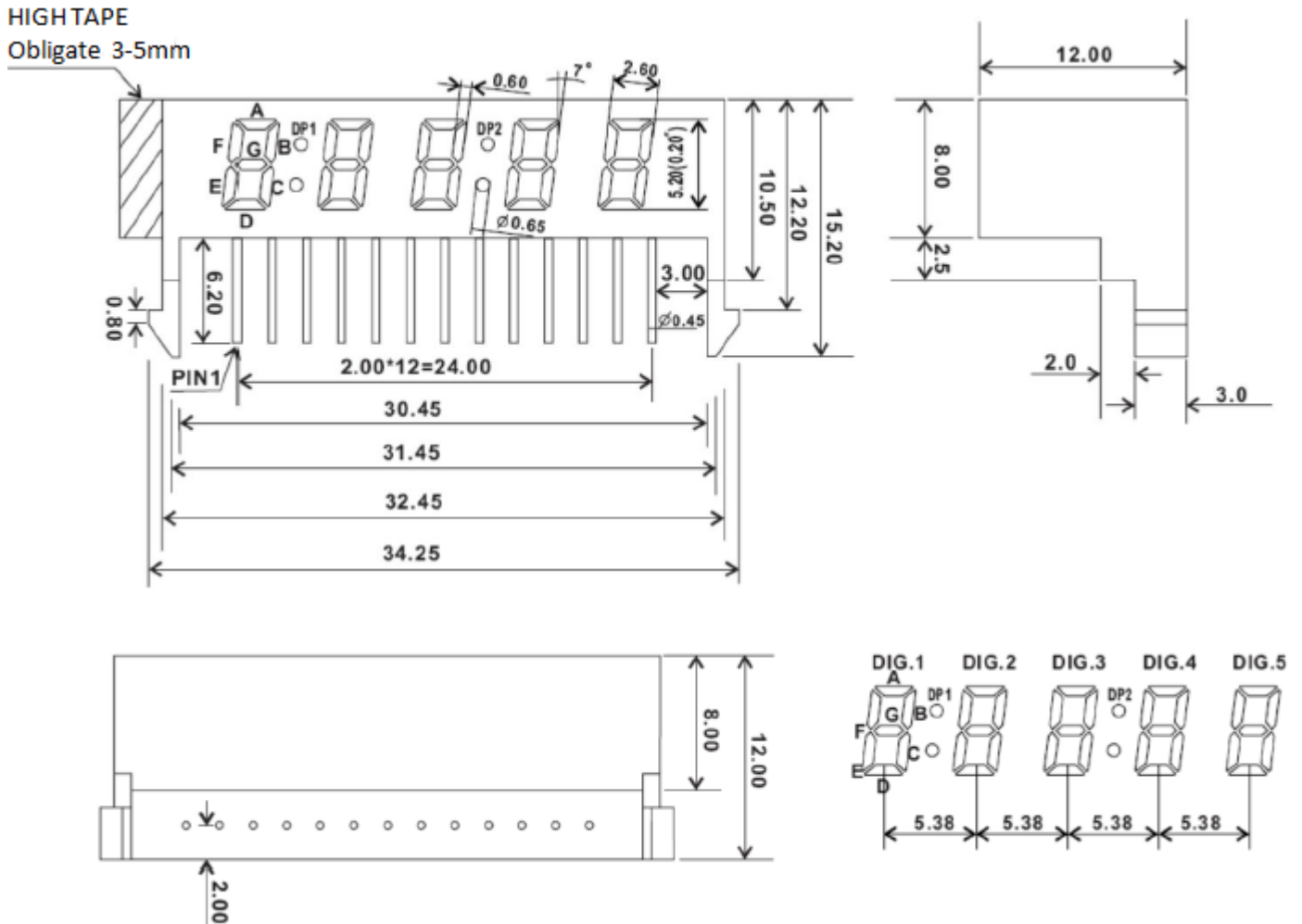
Parameter	Symbol	Parameter Range	Unit
Power Dissipation	PD	≤50	mW
Pulse Forward Current, Period=0.1ms, Duty Cycle=1/10	IPF	≤60	mA
Continuous Forward Current	IAF	≤20	mA
Reverse Voltage	VR	≤5	V
Operating Temperature	Topr	-35~85	°C
Storage Temperature	Tstg	-35~85	°C

For operation above 25°C, IAF, IPF and PD must be reduced. The reducing rate of IAF is 0.36mA/°C. The reducing rate of IPF is 0.86mA/°C, and the reducing rate of power dissipation is 0.75mW/°C. The highest acceptable working current is IAF or IPF, but the life time of the product will be reduced a lot if it works at highest current longly.

3、Optical-Electrical Characteristics:

Parameter	Test Conditions	Symbol	MIN	TYP	MAX	Unit
Luminous Intensity	IF=20mA	IV	40	--	60	mcd
Forward Voltage	IF=20mA	VF	1.8	--	2.3	V
Reverse Current	VR=5V	IR	--	--	100	μA
Peak Wavelength	IF=20mA	λp	630	--	640	nm
Half Wave Width	IF=20mA	Δλ	--	30	--	nm
Half Power Angle	IF=20mA	2θ1/2	--	60	--	Deg.

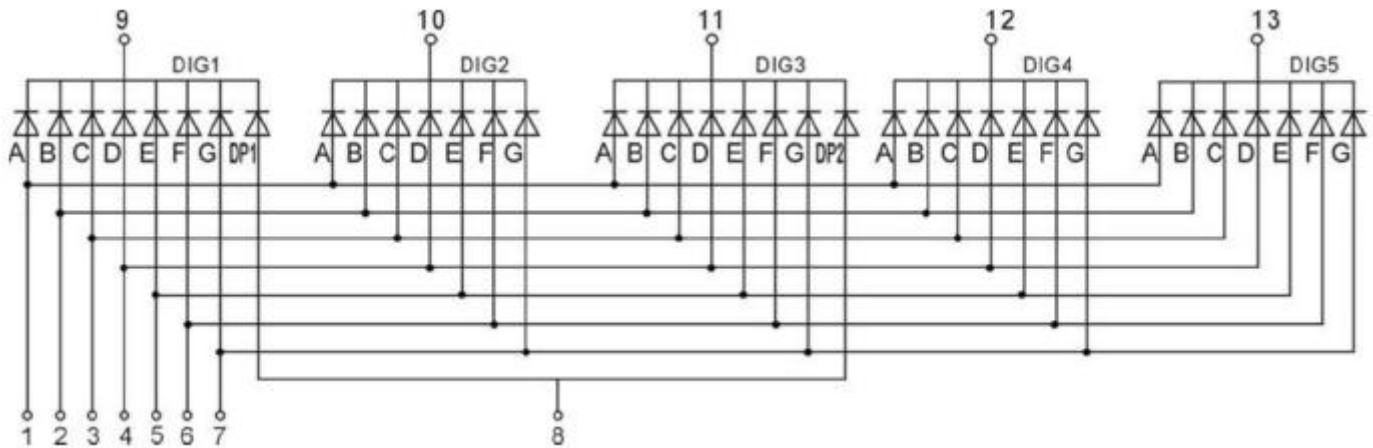
4、 Mechanical Dimension:



Notes:

- 1、 All dimensions are in millimeters. Unspecified Tolerances is ± 0.25 mm.
- 2、 Case Warpage: The vertical height difference between highest and lowest points on the display surface is less than 0.8% of product's length.
- 3、 Pin tip's shift tolerance is ± 0.5 mm.

5、Circuit Diagram:



6、Storage Conditions:

- 1). Storage Temperature: $25^{\circ}\text{C}\pm 10^{\circ}\text{C}$
- 2). Storage Relative Humidity: $50\%\pm 10\%$
- 3). The long term storage of LED results in the static electricity which will deteriorate the optical -electrical characteristics of LED, and it will cause the emitting failure under extreme circumstance.
- 4). Acid, alkali and corrosive gases are strictly prohibited in the storage environment, and strong quake must be avoided.

7、Soldering Conditions:

- 1). Soldering Temperature: $260^{\circ}\text{C}\pm 5^{\circ}\text{C}$.
- 2). Soldering Duration: $\leq 3\text{s}$.
- 3). Soldering Iron Power: $\leq 30\text{W}$.
- 4). The soldering point must be more than 1.6mm away from the products body.

8、Electrostatic Protection:

- 1). Please wear electrostatic prevention wrist strap and use electrostatic prevention blanket when using LED, and the relevant machines and equipments must be connected to ground.
- 2). Please place LED in the environment of ionizing air flow when using LED.

9、 Test Conditions:

- 1). Visual check is done when the ambient illuminance is less than 9 Lux and the visual distance is between 25cm and 30cm.
- 2). The size of the black and white dot is $0.1\text{mm} \leq < ?0.15 \text{ mm}$ and the acceptable amount of the dot is 3. The distance must be more than 1cm between any 2 dots.
- 3). The size of black and white dot is $0.15\text{mm} \leq < ?0.20 \text{ mm}$ and the acceptable amount of the dot is 2. The distance must be more than 1cm between any 2 dots.
- 4). The size of the black and white dot is $0.20\text{mm} \leq < ?0.25\text{mm}$ and the acceptable amount of the dot is 1.
- 5). The scar in the light emitting area is with $\leq ?0.1\text{mm}$, as well as the length is less than 1 mm and the acceptable amount of this scar is 1.
- 6). It is acceptable when the scar is not in the light emitting area, and the scar is not observable when the product is working.

10、 Size Checking condition:

Vernier is used to check the mechanical dimension of the product, which is labelled in this data sheet. Please pay attention to the error which is caused by people.

11、 Conditions for testing electrical properties:

Perform the function related contents in 'QA Final Products Test Method' under constant current.

12、 Moisture Resistant Packing Process

