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# **Segment Digit LED Display**

## **User's Manual**

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# 1. 7 Segment Single Digit LED Display

## 1.1 Common Anode 0.36 Inch (9.14mm)

### PRODUCT DESCRIPTION

- |                                                |
|------------------------------------------------|
| (1) 0.36 Inch (9.14mm) Digit Height            |
| (2) Low current operation                      |
| (3) Excellent color and font characteristics   |
| (4) Colors: White, blue, red, yellow and green |
| (5) Gray or black color background             |
| (6) Common Anode                               |
| (7) RoHs Compliant Part                        |



### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

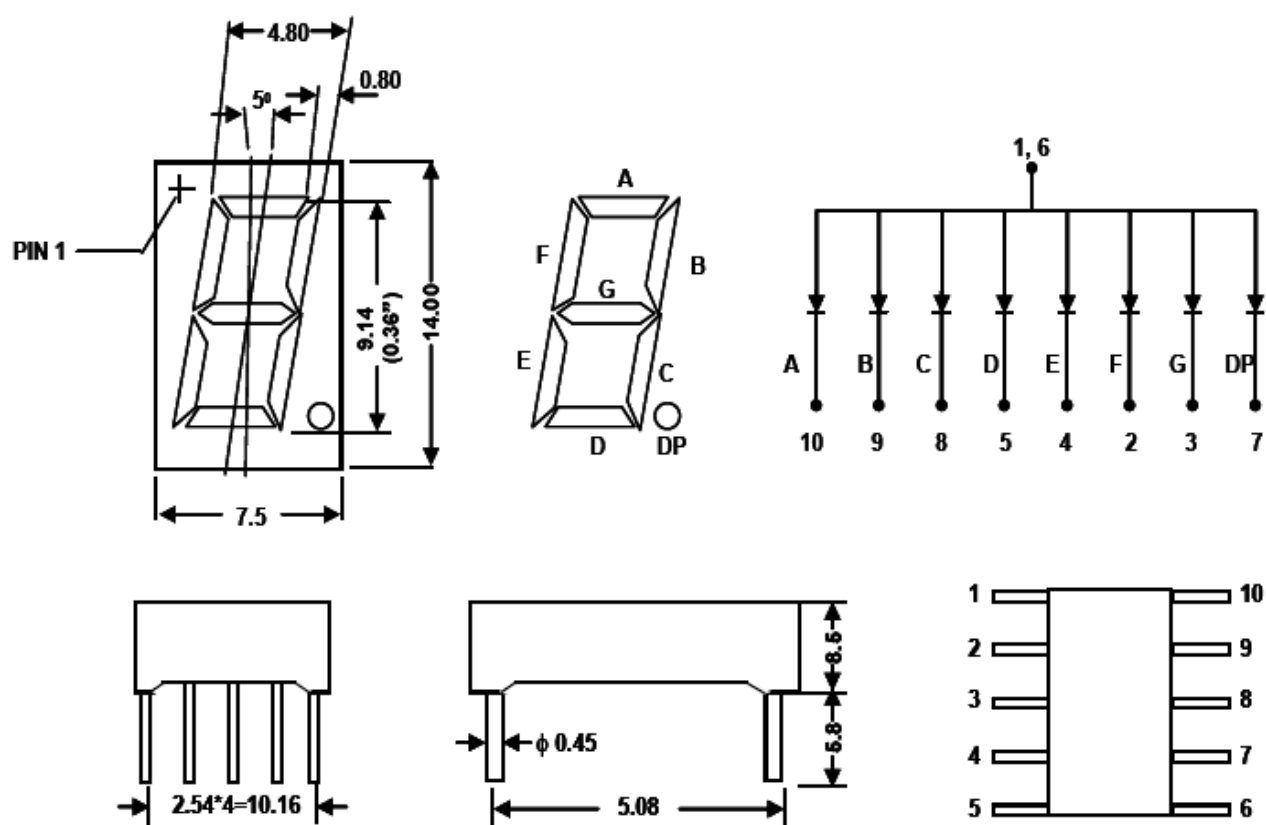
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDS3632AUR11	AlGaAs Red	660	10	1.8	2.3	8,000 ucd
LEDS3632TB11	InGaN Blue	468	10	3.3	4.0	20,000 ucd
LEDS3632YG11	GaP Green	568	10	1.9	2.3	8,000 ucd
LEDS3632UY11	AlInGaP Amber	590	10	1.8	2.3	12,000 ucd
LEDS3612TW11	InGaN White	5,500K	10	3.3	4.0	20,000 ucd

## DEVICE DIAGRAM

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	Common Anode DIG. 1	6	Common Anode DIG. 2
2	Cathode F	7	Cathode DP
3	Cathode G	8	Cathode C
4	Cathode E	9	Cathode B
5	Cathode D	10	Cathode A



## 1.2 Common Cathode 0.36 Inch (9.14mm)

### PRODUCT DESCRIPTION

- (1) 0.36 Inch (9.14mm) Digit Height
- (2) Low current operation
- (3) Excellent color and font characteristics
- (4) Colors: White, blue, red, yellow and green
- (5) Gray or black color background
- (6) Common Cathode
- (7) RoHs Compliant Part



### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

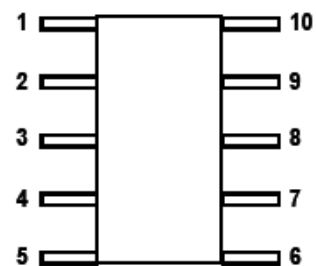
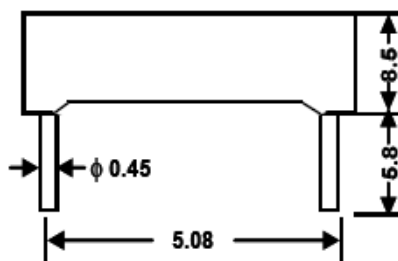
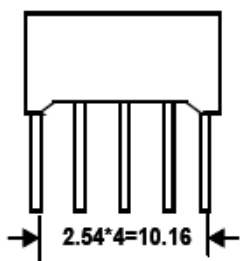
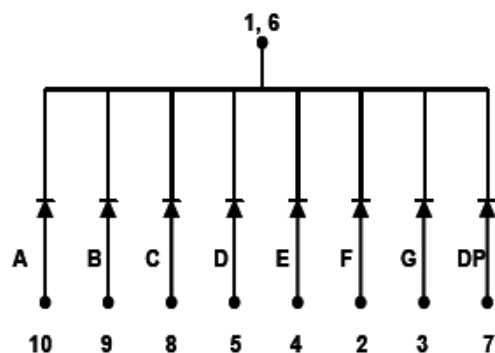
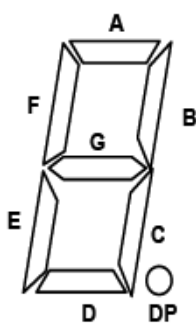
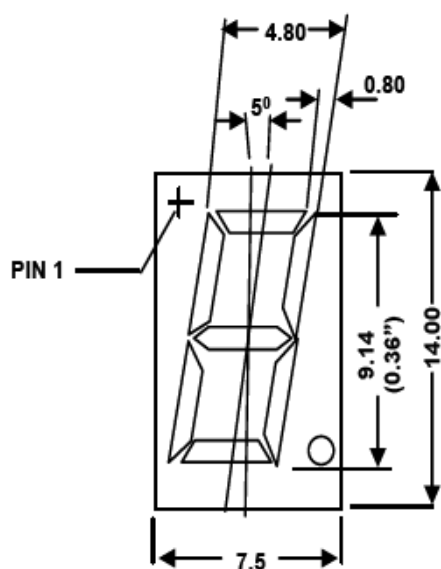
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDS3632AUR1C	AlGaAs Red	660	10	1.8	2.3	8,000 ucd
LEDS3632TB1C	InGaN Blue	468	10	3.3	4.0	20,000 ucd
LEDS3632YG1C	GaP Green	568	10	1.9	2.3	8,000 ucd
LEDS3632UY1C	AlInGaP Amber	590	10	1.8	2.3	12,000 ucd
LEDS3612TW1C	InGaN White	5,500K	10	3.3	4.0	20,000 ucd

## DEVICE DIAGRAM

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	Common Cathode DIG. 1	6	Common Cathode DIG. 6
2	Anode F	7	Anode DP
3	Anode G	8	Anode C
4	Anode E	9	Anode B
5	Anode D	10	Anode A



### 1.3 Common Anode 0.56 Inch (14.20mm)

#### PRODUCT DESCRIPTION

- (1) 0.56 Inch (14.20mm) Digit Height
- (2) Low current operation
- (3) Excellent color and font characteristics
- (4) Colors: White, blue, red, yellow and green
- (5) Gray or black color background
- (6) Common Anode
- (7) RoHs Compliant Part



#### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

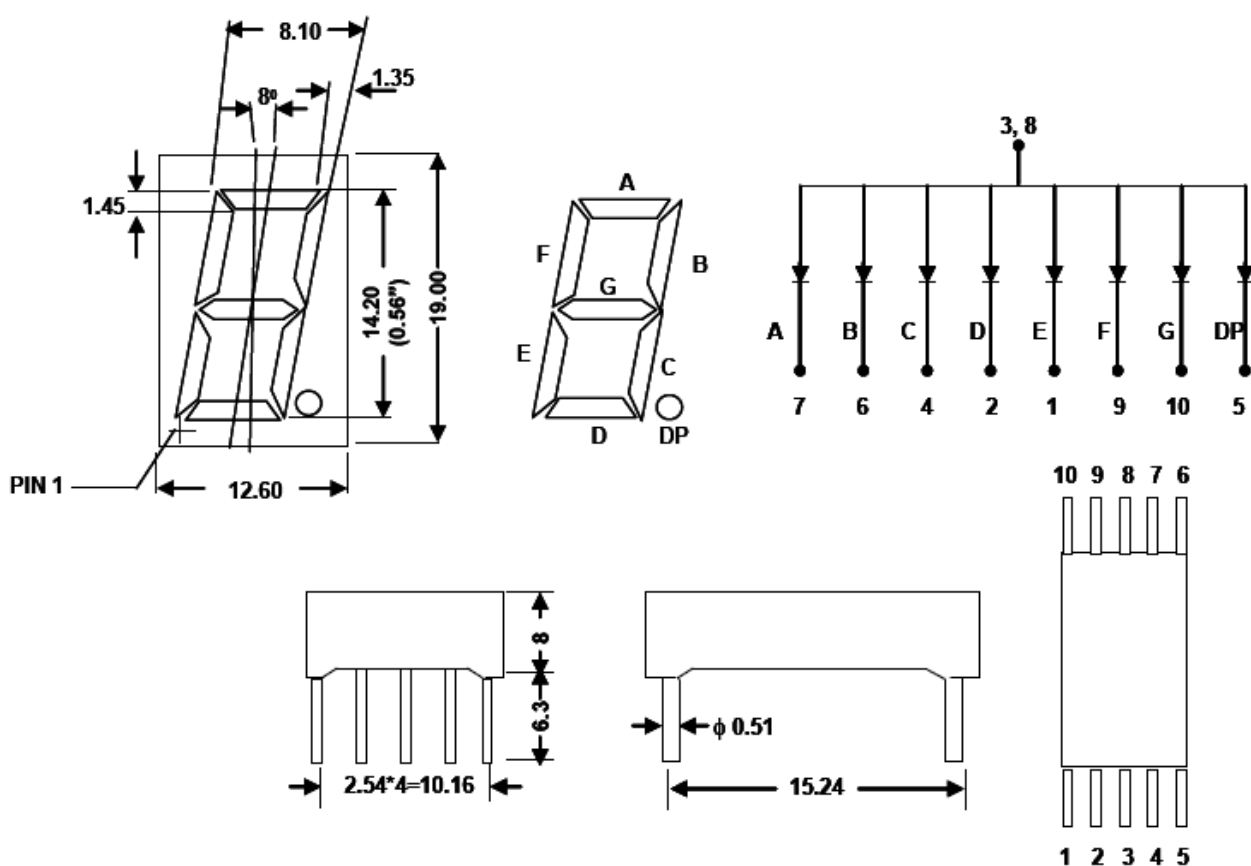
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

#### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDS5612AUR11	AlGaAs Red	660	10	1.8	2.3	10,000 ucd
LEDS5612TB11	InGaN Blue	468	10	3.3	4.0	28,000 ucd
LEDS5612YG11	GaP Green	568	10	1.9	2.3	12,000 ucd
LEDS5612UY11	AlInGaP Amber	590	10	1.8	2.3	12,000 ucd
LEDS5612TW11	InGaN White	5,500K	10	3.3	4.0	28,000 ucd

## DEVICE DIAGRAM

PIN NO.			
1	Cathode E	6	Cathode B
2	Cathode D	7	Cathode A
3	Common Anode DIG. 1	8	Common Anode DIG. 2
4	Cathode C	9	Cathode F
5	Cathode DP	10	Cathode G

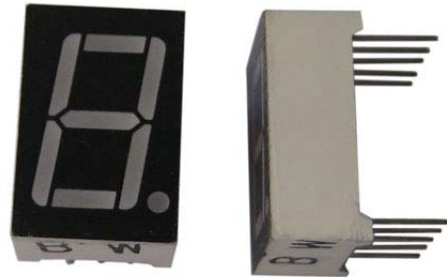




## 1.4 Common Cathode 0.56 Inch (14.20mm)

### PRODUCT DESCRIPTION

- (1) 0.56 Inch (14.20mm) Digit Height
- (2) Low current operation
- (3) Excellent color and font characteristics
- (4) Colors: White, blue, red, yellow and green
- (5) Gray or black color background
- (6) Common Cathode
- (7) RoHs Compliant Part



### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

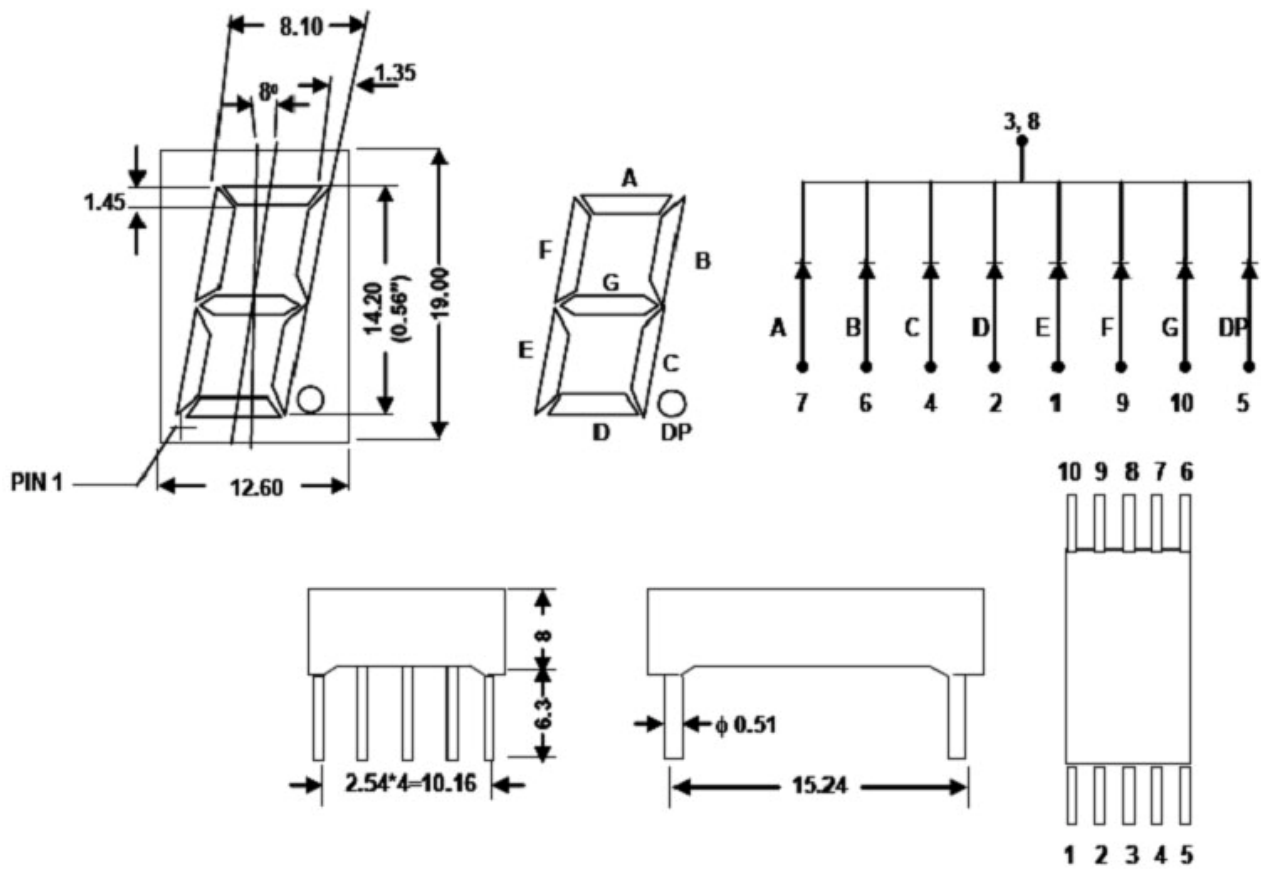
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDS5612AUR1C	AlGaAs Red	660	10	1.8	2.3	10,000 ucd
LEDS5612TB1C	InGaN Blue	468	10	3.3	4.0	28,000 ucd
LEDS5612YG1C	GaP Green	568	10	1.9	2.3	12,000 ucd
LEDS5612UY1C	AlInGaP Amber	590	10	1.8	2.3	12,000 ucd
LEDS5612TW1C	InGaN White	5,500K	10	3.3	4.0	28,000 ucd

## DEVICE DIAGRAM

PIN NO.			
1	Anode E	6	Anode B
2	Anode D	7	Anode A
3	Common Cathode DIG. 1	8	Common Cathode DIG. 2
4	Anode C	9	Anode F
5	Anode DP	10	Anode G



## 1.5 Common Anode 0.8 Inch (20.40mm)

PRODUCT DESCRIPTION	
(1) 0.8 Inch (20.40mm) Digit Height	(5) Gray or black color background
(2) Low current operation	(6) Common Anode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	

### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

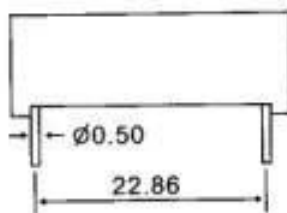
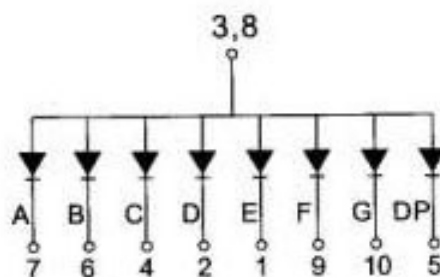
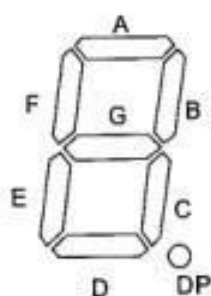
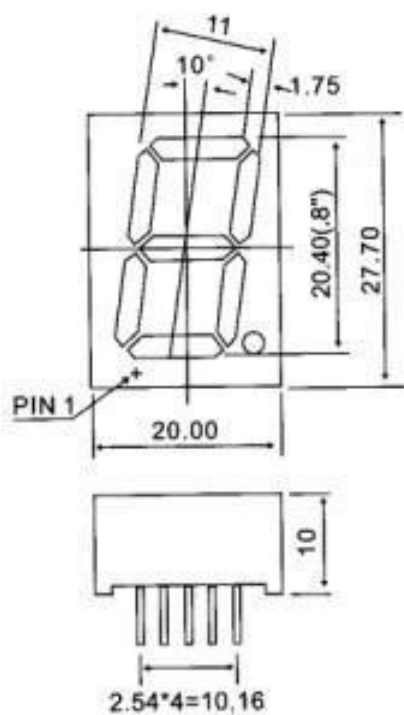
### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDS8012AUR11	AlGaAs Red	660	10	1.8	2.3	10,000 ucd
LEDS8012TB11	InGaN Blue	468	10	3.3	4.0	28,000 ucd
LEDS8012YG11	GaP Green	568	10	1.9	2.3	12,000 ucd
LEDS8012UY11	AlInGaP Amber	590	10	1.8	2.3	12,000 ucd
LEDS8012TW11	InGaN White	5,500K	10	3.3	4.0	28,000 ucd

## DEVICE DIAGRAM

### PIN NO.

1	Cathode E	6	Cathode B
2	Cathode D	7	Cathode A
3	Common Anode DIG. 1	8	Common Anode DIG. 2
4	Cathode C	9	Cathode F
5	Cathode DP	10	Cathode G



## 1.6 Common Cathode 0.8 Inch (20.40mm)

PRODUCT DESCRIPTION	
(1) 0.8 Inch (20.40mm) Digit Height	(5) Gray or black color background
(2) Low current operation	(6) Common Cathode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	

### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

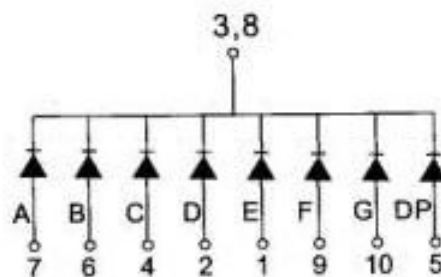
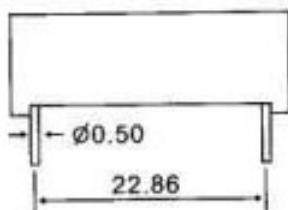
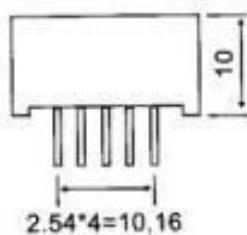
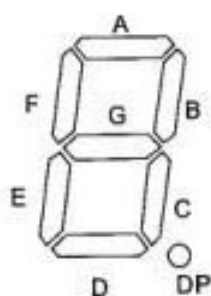
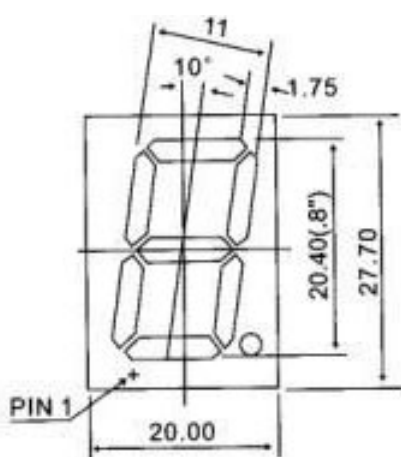
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDS8012AUR1C	AlGaAs Red	660	10	1.8	2.3	10,000 ucd
LEDS8012TB1C	InGaN Blue	468	10	3.3	4.0	28,000 ucd
LEDS8012YG1C	GaP Green	568	10	1.9	2.3	12,000 ucd
LEDS8012UY1C	AlInGaP Amber	590	10	1.8	2.3	12,000 ucd
LEDS8012TW1C	InGaN White	5,500K	10	3.3	4.0	28,000 ucd

## DEVICE DIAGRAM

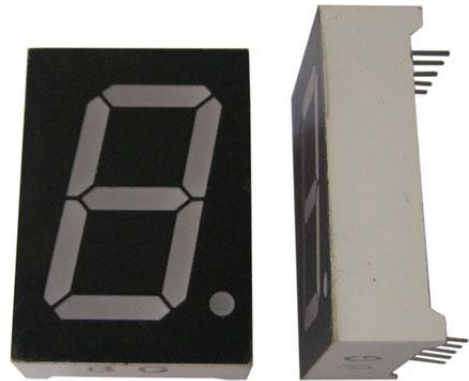
PIN NO.			
1	Anode E	6	Anode B
2	Anode D	7	Anode A
3	Common Cathode DIG. 1	8	Common Cathode DIG. 2
4	Anode C	9	Anode F
5	Anode DP	10	Anode G



## 1.7 Common Anode 1.0 Inch (25.40mm)

### PRODUCT DESCRIPTION

- (1) 1.0 Inch (25.40mm) Digit Height
- (2) Low current operation
- (3) Excellent color and font characteristics
- (4) Colors: White, blue, red, yellow and green
- (5) Gray or black color background
- (6) Common Anode
- (7) RoHs Compliant Part



### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDS10012TUR11	AlInGaP Red	630	10	3.6 (1)	4.2	20,000 ucd
LEDS10012TB11	InGaN Blue	468	10	6.0 (2)	7.0	45,000 ucd
LEDS10012YG11	AlInGaP Green	568	10	3.6 (1)	4.2	20,000 ucd
LEDS10012UY11	AlInGaP Amber	590	10	3.6 (1)	4.2	25,000 ucd
LEDS10012TW11	InGaN White	5,500K	10	6.0 (2)	7.0	45,000 ucd

(1) Cathode DP Vf = 1.8V ONLY uses one led chip for red, yellow and green color.

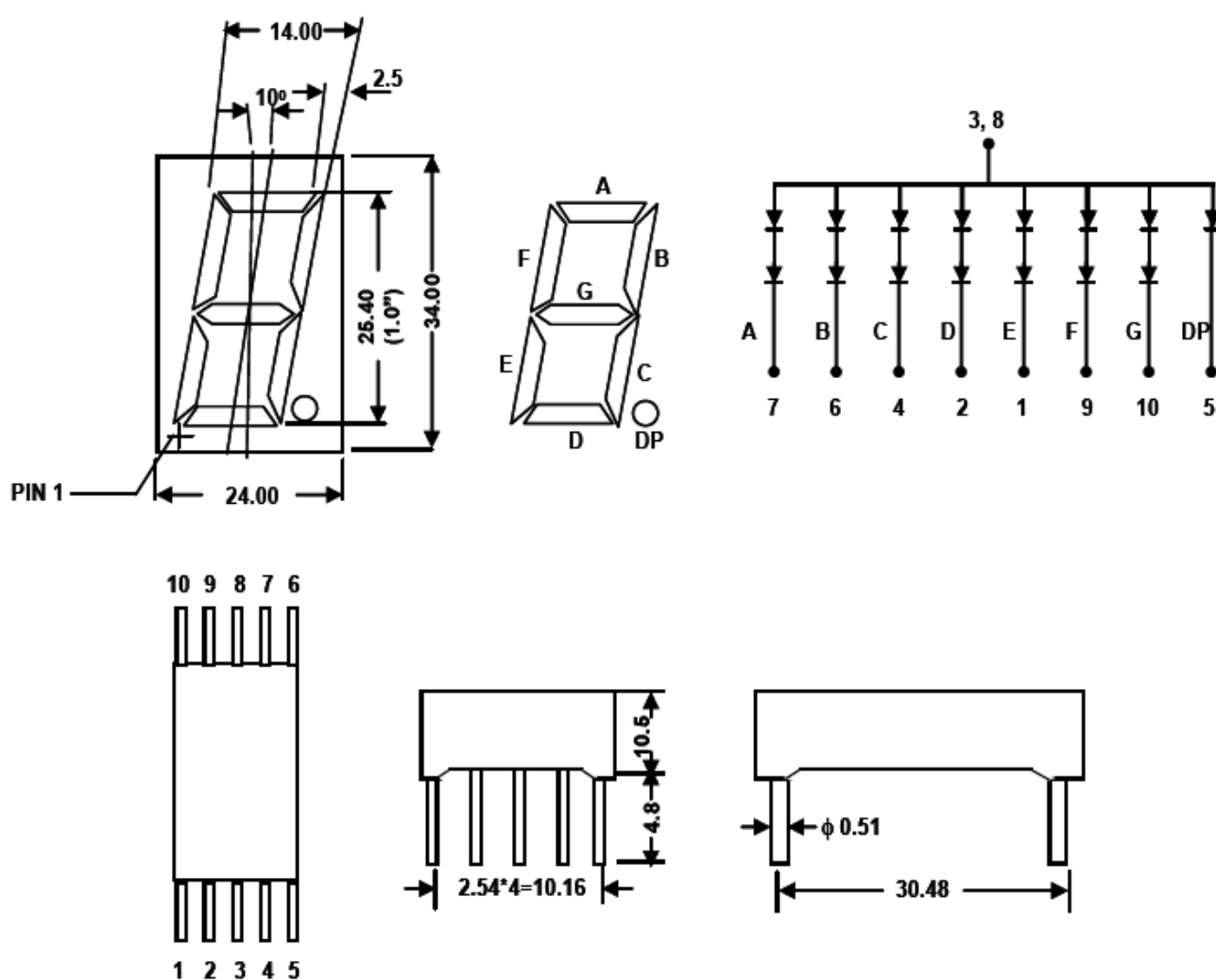
(2) Cathode DP Vf = 3.3V ONLY uses one led chip for blue and white color.

## DEVICE DIAGRAM

### PIN NO.

1	Cathode E	6	Cathode B
2	Cathode D	7	Cathode A
3	Common Anode DIG. 1	8	Common Anode DIG. 2
4	Cathode C	9	Cathode F
5	Cathode DP (1)	10	Cathode G

(1) Cathode DP  $V_f = 1.8V$  for red, yellow and green and  $V_f = 3.3V$  for blue.





## 1.8 Common Anode 1.5 Inch (38.10mm)

### PRODUCT DESCRIPTION

- (1) 1.5 Inch (38.10mm) Digit Height
- (2) Low current operation
- (3) Excellent color and font characteristics
- (4) Colors: White, blue, red, yellow and green
- (5) Gray or black color background
- (6) Common Anode
- (7) RoHs Compliant Part



### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDS15012TUR11	AlInGaP Red	635	10	3.6(1)	4.2	75,000 ucd
LEDS15012TB11	InGaN Blue	468	10	6.0(2)	7.0	75,000 ucd
LEDS15012YG11	AlInGaP Green	568	10	3.6(1)	4.2	50,000 ucd
LEDS15012UY11	AlInGaP Amber	590	10	3.6(1)	4.2	60,000 ucd
LEDS15012TW11	InGaN White	5,500K	10	6.0(2)	7.0	75,000 ucd

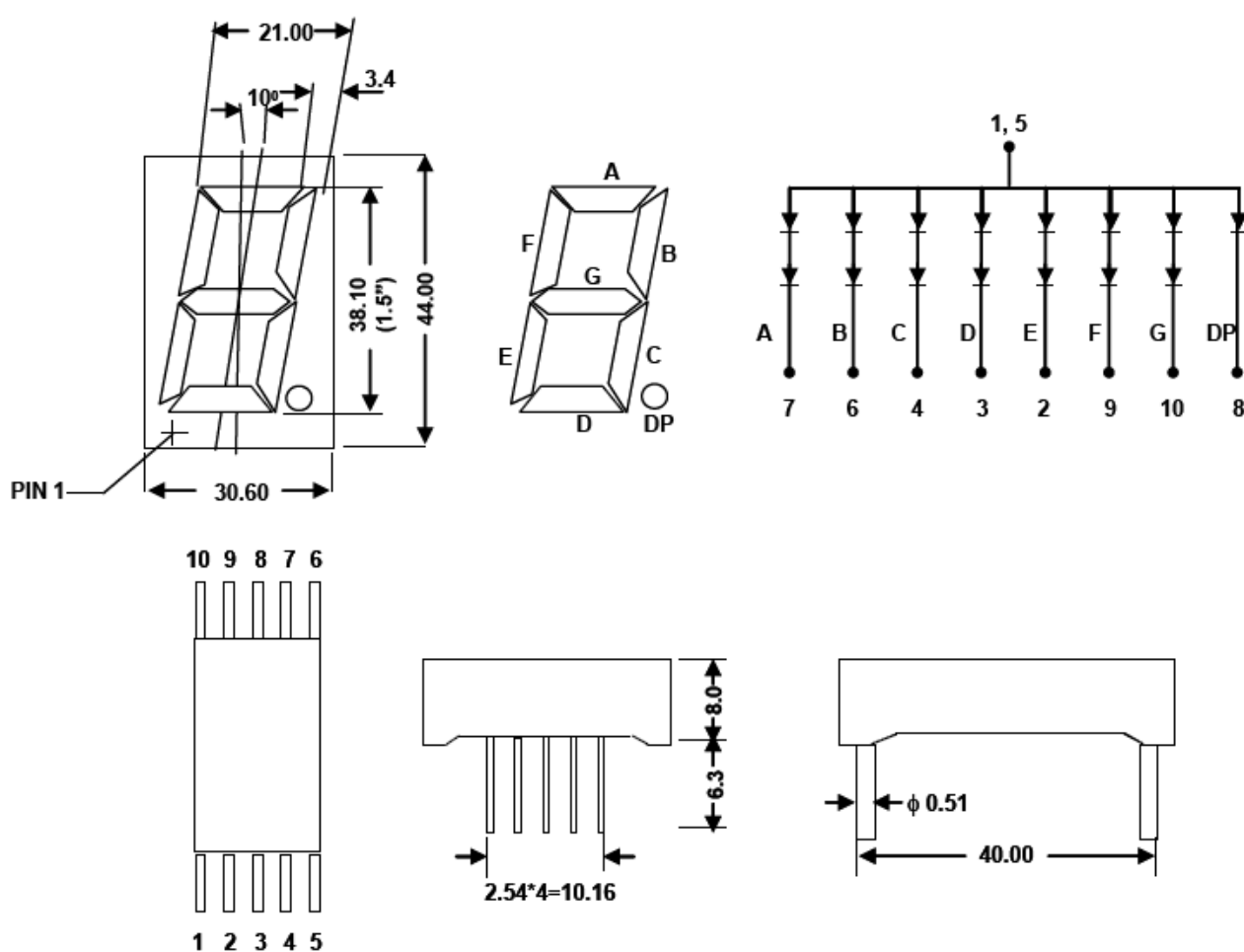
(1) Cathode DP Vf = 1.8V ONLY uses one led chip for red, yellow and green color.

(2) Cathode DP Vf = 3.3V ONLY uses one led chip for blue and white color.

## DEVICE DIAGRAM

PIN NO.			
1	Common Anode DIG. 1	6	Cathode B
2	Cathode E	7	Cathode A
3	Cathode D	8	Cathode DP (1)
4	Cathode C	9	Cathode F
5	Common Anode DIG. 2	10	Cathode G

(1) Cathode DP Vf = 1.8V for red, yellow and green and Vf = 3.3V for blue.



## 1.9 Common Anode 2.3 Inch (57.0mm)

### PRODUCT DESCRIPTION

- (1) 2.3 Inch (56.80mm) Digit Height
- (2) Low current operation
- (3) Excellent color and font characteristics
- (4) Colors: White, blue, red, yellow and green
- (5) Gray or black color background
- (6) Common Anode
- (7) RoHs Compliant Part



### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

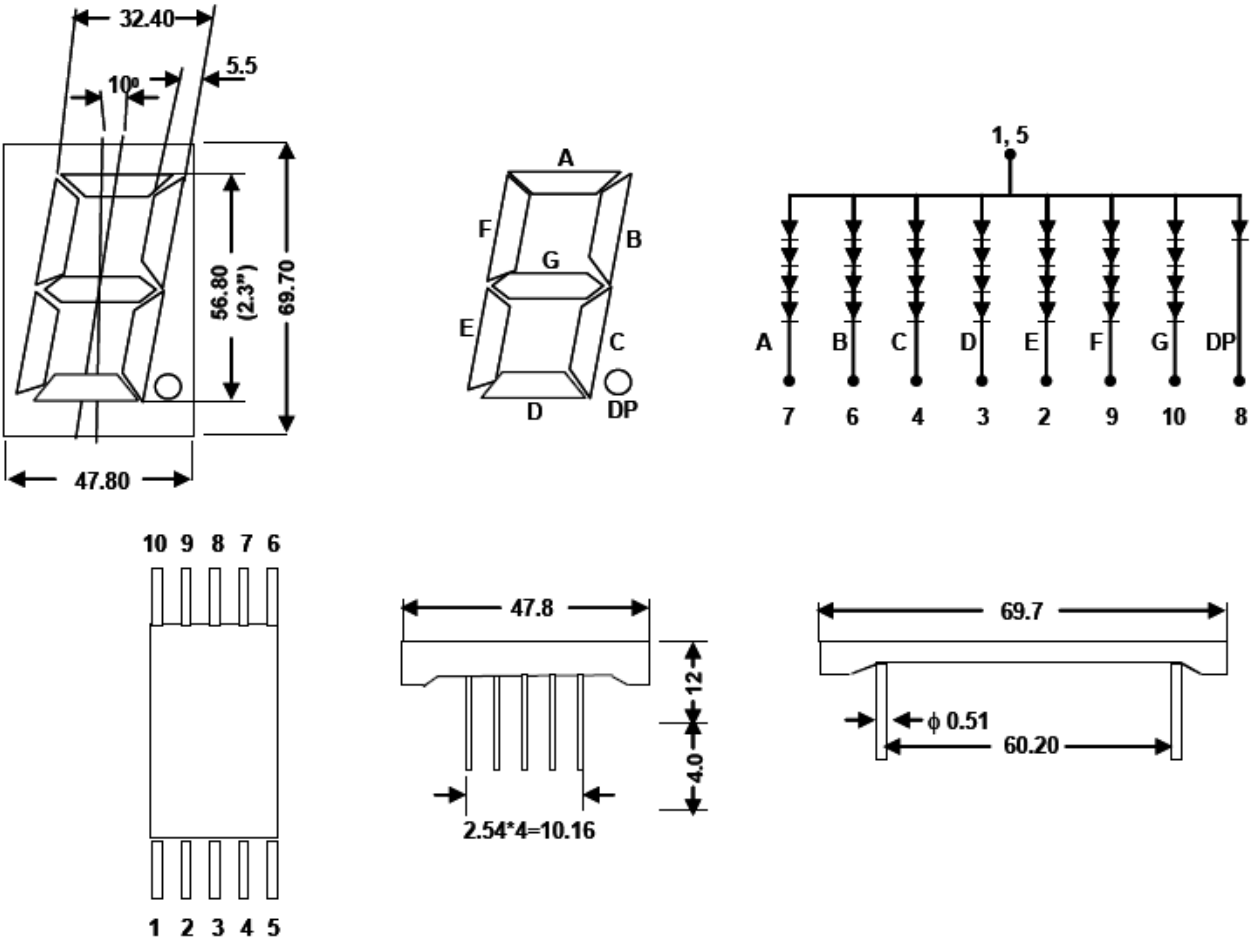
PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDS23012TUR11	AlInGaP Red	630	10	6.8 (1)	8.0	75,000 ucd
LEDS23012TB11	InGaN Blue	468	10	13.25 (2)	14.0	90,000 ucd
LEDS23012YG11	AlInGaP Green	568	10	6.8 (1)	8.0	75,000 ucd
LEDS23012UY11	AlInGaP Amber	590	10	6.8 (1)	8.0	75,000 ucd
LEDS23012TW11	InGaN White	5,500K	10	13.25 (2)	14.0	90,000 ucd

- (1) Cathode DP Vf = 1.8V ONLY uses one led chip for red, yellow and green color.
- (2) Cathode DP Vf = 3.3V ONLY uses one led chip for blue and white color.

DEVICE DIAGRAM

PIN NO.			
1	Common Anode DIG. 1	6	Cathode B
2	Cathode E	7	Cathode A
3	Cathode D	8	Cathode DP (1)
4	Cathode C	9	Cathode F
5	Common Anode DIG. 2	10	Cathode G

- (1) Cathode DP Vf = 1.8V for red, yellow and green and Vf = 3.3V for blue.



## 1.10 Common Anode 4.0 Inch (100.0mm)

PRODUCT DESCRIPTION	
(1) 4.0 Inch (100.0mm) Digit Height	(5) Gray or black color background
(2) Low current operation	(6) Common Anode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	

### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDS40012TUR11	AlInGaP Red	630	10	9.0 (1)	11.0	120,000 ucd
LEDS40012TB11	InGaN Blue	468	10	16.25 (2)	17.5	130,000 ucd
LEDS40012YG11	AlInGaP Green	568	10	9.0 (1)	11.0	120,000 ucd
LEDS40012UY11	AlInGaP Amber	590	10	9.0 (1)	11.0	120,000 ucd
LEDS40012TW11	InGaN White	5,500K	10	16.25 (2)	17.5	60,000 ucd

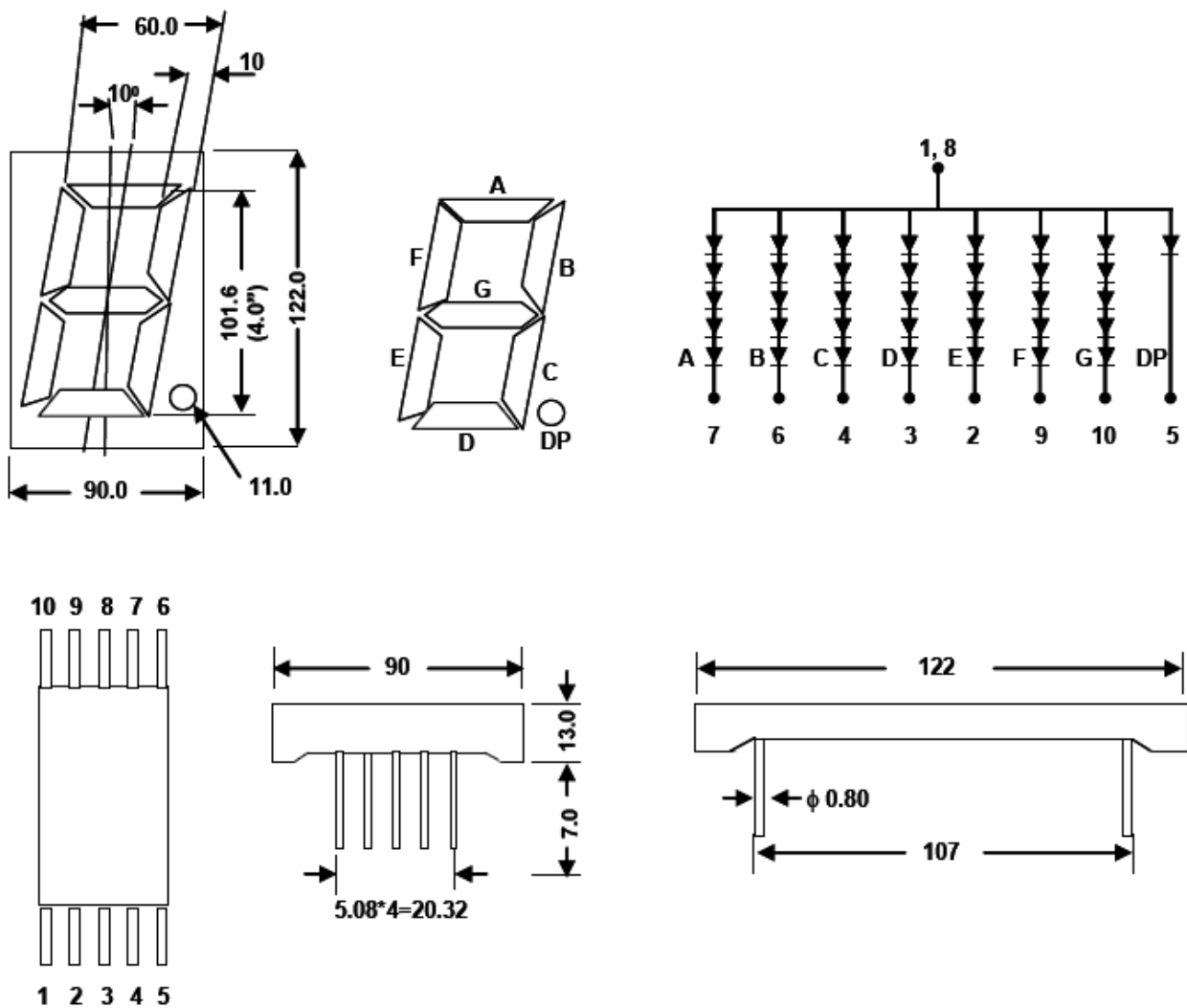
(1) Cathode DP Vf = 1.8V ONLY uses one led chip for red, yellow and green color.

(2) Cathode DP Vf = 3.3V ONLY uses one led chip for blue and white color.

## DEVICE DIAGRAM

PIN NO.		PIN NO.	
1	Common Anode DIG. 1	6	Cathode B
2	Cathode E	7	Cathode A
3	Cathode D	8	Common Anode
4	Cathode C	9	Cathode F
5	Cathode DP (1)	10	Cathode G

(1) Cathode DP  $V_f = 1.8V$  for red, yellow and green and  $V_f = 3.3V$  for blue.



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## 2. 7 Segment Double Digit LED Display

### 2.1 Common Anode 0.36 Inch (9.14mm)

#### PRODUCT DESCRIPTION

- |                                                |
|------------------------------------------------|
| (1) Double Digit 0.36 Inch (9.14mm) Height     |
| (2) Low current operation                      |
| (3) Excellent color and font characteristics   |
| (4) Colors: White, blue, red, yellow and green |
| (5) Gray or black color background             |
| (6) Common Anode                               |
| (7) RoHs Compliant Part                        |



#### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

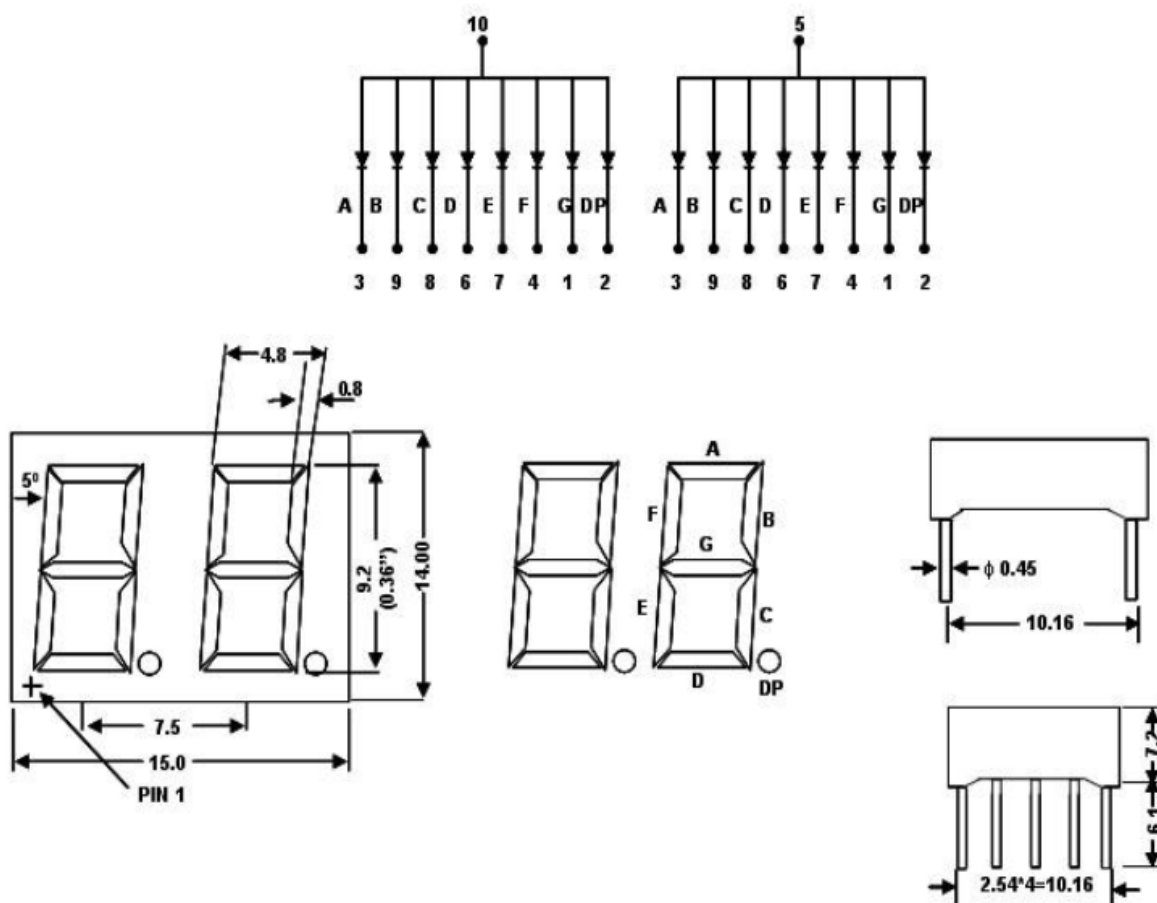
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

#### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT ( A)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDD3622AUR11	AlGaAs Red	660	10	1.8	2.3	10,000 ucd
LEDD3622TB11	InGaN Blue	468	10	3.3	4.0	20,000 ucd
LEDD3622YG11	GaP Green	568	10	1.9	2.3	10,000 ucd
LEDD3622UY11	AlInGaP Amber	590	10	1.8	2.3	10,000 ucd
LEDD3622TW11	InGaN White	5,500K	10	3.3	4.0	20,000 ucd

## DEVICE DIAGRAM

First Digit Segment				Second Digit Segment			
PIN		PIN		PIN		PIN	
1	Cathode G1	6	Cathode D1	1	Cathode G2	6	Cathode D2
2	Cathode DP1	7	Cathode E1	2	Cathode DP2	7	Cathode E2
3	Cathode A1	8	Cathode C1	3	Cathode A2	8	Cathode C2
4	Cathode F1	9	Cathode B1	4	Cathode F2	9	Cathode B2
5	Common Anode 5	10	Common Anode 10	5	Common Anode 5	10	Common Anode 10





## 2.2 Common Anode 0.56 Inch (14.20mm)

PRODUCT DESCRIPTION	
(1) Double Digit 0.56 Inch (14.20mm) Height	(5) Gray or black color background
(2) Low current operation	(6) Common Anode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	

### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

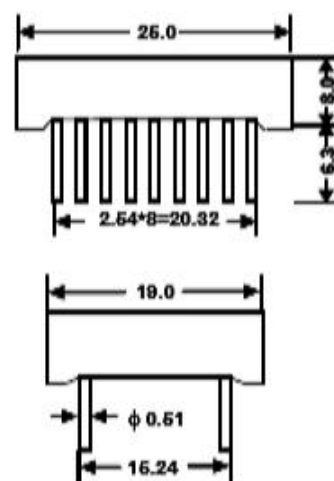
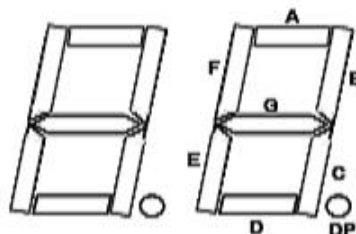
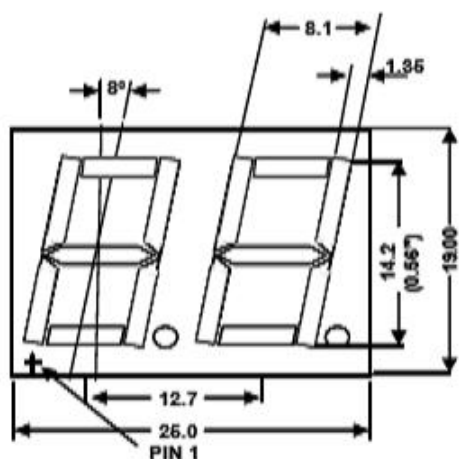
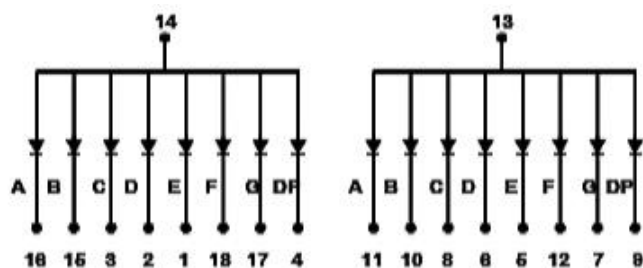
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT ( A)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDD5622AUR11	AlGaAs Red	660	10	1.8	2.3	20,000 ucd
LEDD5622TB11	InGaN Blue	468	10	3.3	4.0	30,000 ucd
LEDD5622YG11	GaP Green	568	10	1.9	2.3	20,000 ucd
LEDD5622UY11	AlInGaP Amber	590	10	1.8	2.3	22,000 ucd
LEDD5622TW11	InGaN White	5,500K	10	3.3	4.0	30,000 ucd

## DEVICE DIAGRAM

PIN		PIN		PIN		PIN	
1	Cathode E1	6	Cathode D2	11	Cathode A2	16	Cathode A1
2	Cathode D1	7	Cathode G2	12	Cathode F2	17	Cathode G1
3	Cathode C1	8	Cathode C2	13	Common Anode 2	18	Cathode F1
4	Cathode DP1	9	Cathode DP1	14	Common Anode 1		
5	Cathode E2	10	Cathode B2	15	Cathode B1		



---

## 2.3 Common Cathode 0.56 Inch (14.20mm)

PRODUCT DESCRIPTION	
(1) Double Digit 0.56 Inch (14.20mm) Height	(5) Gray or black color background
(2) Low current operation	(6) Common Cathode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	

### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

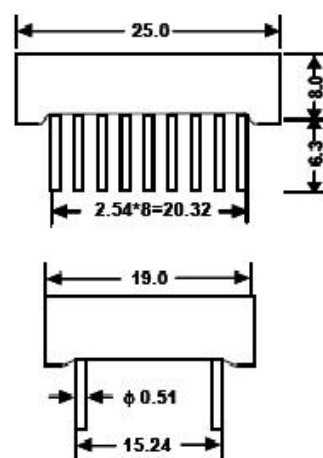
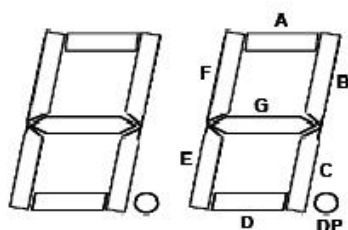
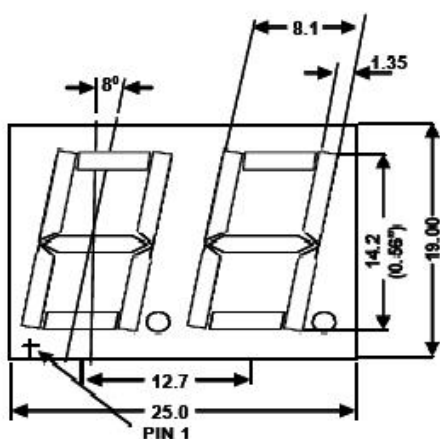
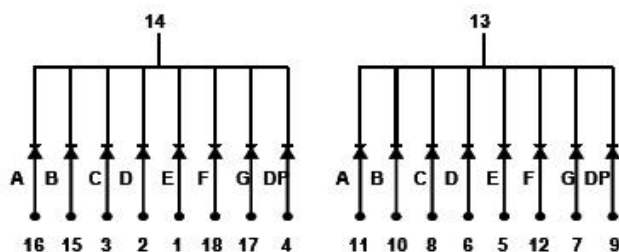
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT ( A)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDD5622TW1C	InGaN White	5,500K	10	3.3	4.0	25,000 ucd

## DEVICE DIAGRAM

PIN		PIN		PIN		PIN	
1	Cathode E1	6	Cathode D2	11	Cathode A2	16	Cathode A1
2	Cathode D1	7	Cathode G2	12	Cathode F2	17	Cathode G1
3	Cathode C1	8	Cathode C2	13	Common Anode 2	18	Cathode F1
4	Cathode DP1	9	Cathode DP1	14	Common Anode 1		
5	Cathode E2	10	Cathode B2	15	Cathode B1		



## 2.4 Common Anode 1.0 Inch (25.40mm)

PRODUCT DESCRIPTION	
(1) Double Digit 1.0 Inch (25.40mm) Height	(5) Gray or black color background
(2) Low current operation	(6) Common Anode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	

### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

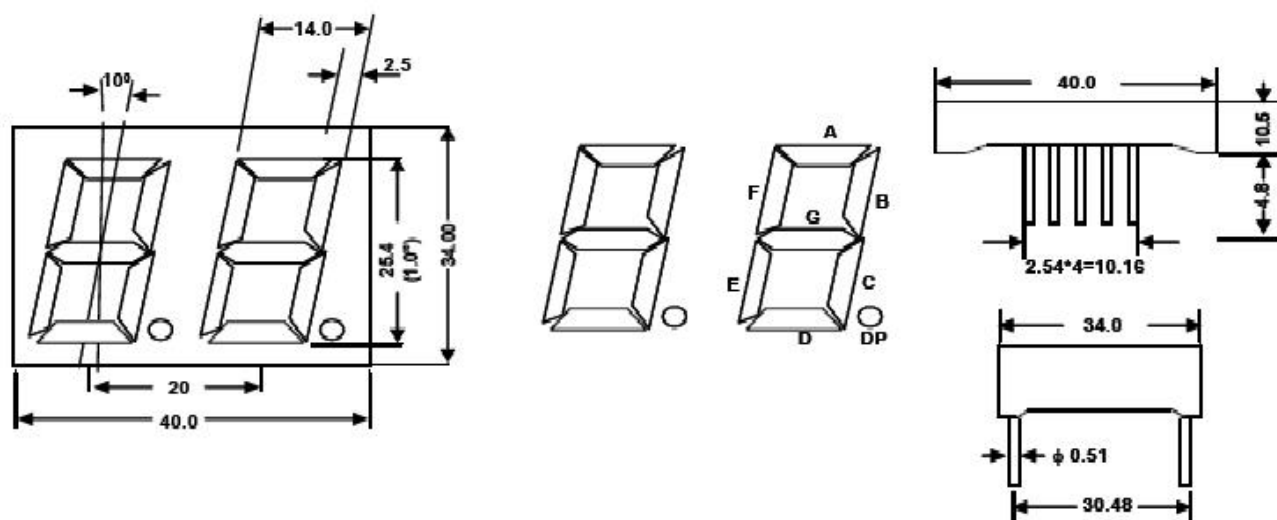
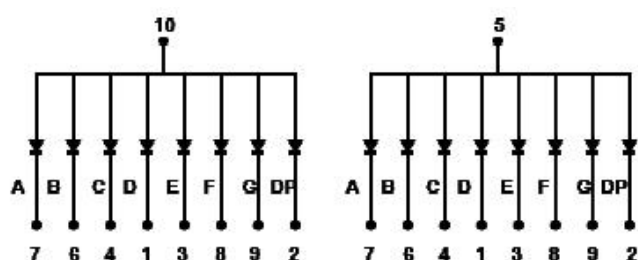
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDD10022TUR11	AlInGaP Red	630	10	1.8	2.3	30,000 ucd
LEDD10022TB11	InGaN Blue	468	10	3.3	4.0	48,000 ucd
LEDD10022YG11	AlInGaP Green	568	10	1.9	2.3	30,000 ucd
LEDD10022UY11	AlInGaP Amber	590	10	1.8	2.3	30,000 ucd
LEDD10022TW11	InGan White	5,500K	10	3.3	4.0	—

## DEVICE DIAGRAM

First Digit Segment				Second Digit Segment			
PIN		PIN		PIN		PIN	
1	Cathode D1	6	Cathode B1	1	Cathode D2	6	Cathode B2
2	Cathode DP1	7	Cathode A1	2	Cathode DP2	7	Cathode A2
3	Cathode E1	8	Cathode F1	3	Cathode E2	8	Cathode F2
4	Cathode C1	9	Cathode G1	4	Cathode C2	9	Cathode G2
5	Common Anode 5	10	Common Anode 10	5	Common Anode 5	10	Common Anode 10



### 3. 7 Segment Three Digit LED Display

#### 3.1 Common Anode 0.36 Inch (9.14mm)

PRODUCT DESCRIPTION	
(1) Three Digit 0.36 Inch (9.14mm) Height	(5) Gray or black color background
(2) Low current operation	(6) Common Anode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	

#### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

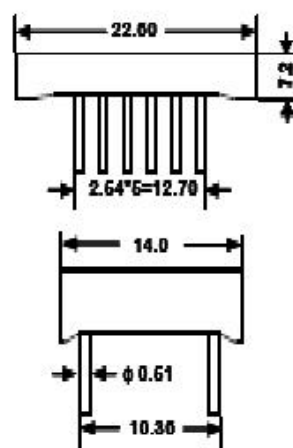
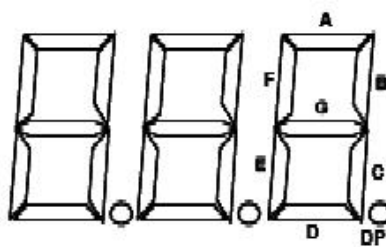
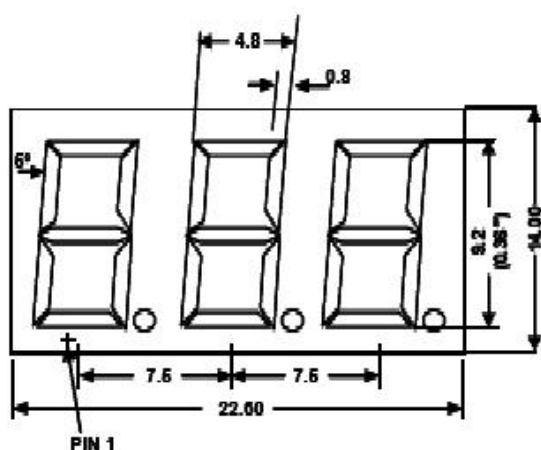
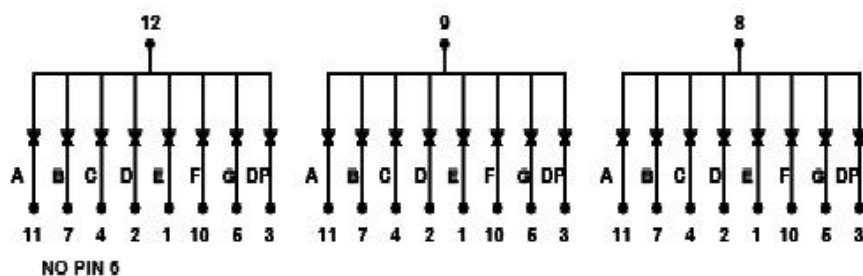
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

#### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT ( A)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDT3632AUR11	AlGaAs Red	660	10	1.8	2.3	18,000 ucd
LEDT3632TUR11	InGaAlP Red	630	10	1.8	2.3	30,000 ucd
LEDT3632TB11	InGaN Blue	468	10	3.3	4.0	35,000 ucd
LEDT3632YG11	GaP Green	568	10	1.9	2.3	12,000 ucd
LEDT3632UY11	AlInGaP Amber	590	10	1.8	2.3	30,000 ucd
LEDT3632TW11	InGan White	5,500K	10	3.3	4.0	35,000 ucd

## DEVICE DIAGRAM

First Digit Segment				Second Digit Segment			
PIN		PIN		PIN		PIN	
1	Cathode E1	6	NC	1	Cathode E2	6	NC
2	Cathode D1	7	Cathode B1	2	Cathode D2	7	Cathode B2
3	Cathode DP1	10	Cathode F1	3	Cathode DP2	10	Cathode F2
4	Cathode C1	11	Cathode A1	4	Cathode C2	11	Cathode A2
5	Cathode G1			5	Cathode G2		
Third Digit Segment							
PIN		PIN		PIN			
1	Cathode E3	6	NC	8	Common Anode 8		
2	Cathode D3	7	Cathode B3	9	Common Anode 9		
3	Cathode DP3	10	Cathode F3	12	Common Anode 10		
4	Cathode C3	11	Cathode A3				
5	Cathode G3						





## 3.2 Common Cathode 0.36 Inch (9.14mm)

PRODUCT DESCRIPTION	
(1) Three Digit 0.36 Inch (9.14mm) Height	(5) Gray or black color background
(2) Low current operation	(6) Common Cathode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	

### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

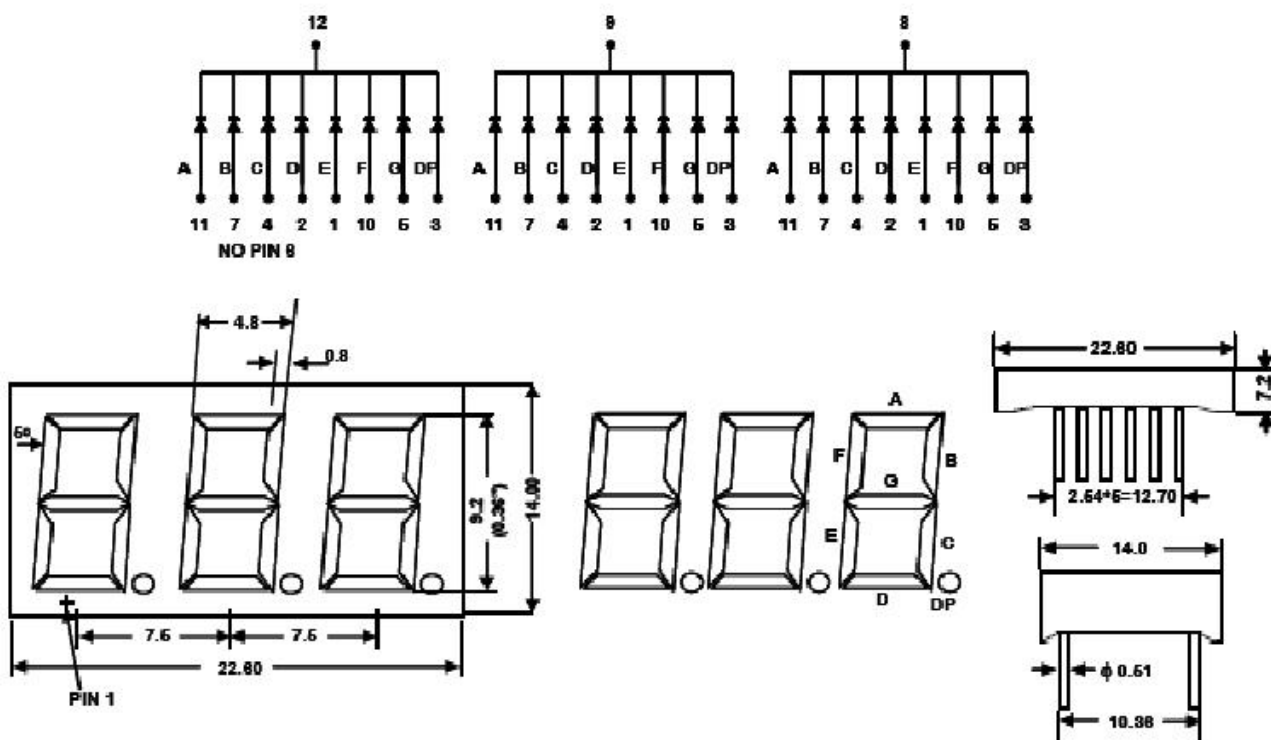
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDT3632TUR1C	InGaAlP Red	630	10	1.8	2.3	40,000 ucd
LEDT3632TB1C	InGaN Blue	468	10	3.3	4.0	35,000 ucd
LEDT3632YG1C	GaP Green	568	10	1.9	2.3	12,000 ucd
LEDT3632UY1C	AlInGaP Amber	590	10	1.8	2.3	30,000 ucd
LEDT3632TW1CG	InGaN White	5,500K	10	3.3	4.0	35,000 ucd

## DEVICE DIAGRAM

First Digit Segment				Second Digit Segment			
PIN		PIN		PIN		PIN	
1	Anode E1	6	NC	1	Anode E2	6	NC
2	Anode D1	7	Anode B1	2	Anode D2	7	Anode B2
3	Anode DP1	10	Anode F1	3	Anode DP2	10	Anode F2
4	Anode C1	11	Anode A1	4	Anode C2	11	Anode A2
5	Anode G1			5	Anode G2		
Third Digit Segment							
PIN		PIN		PIN			
1	Anode E3	6	NC	8	Common Cathode 8		
2	Anode D3	7	Anode B3	9	Common Cathode 9		
3	Anode DP3	10	Anode F3	12	Common Cathode 10		
4	Anode C3	11	Anode A3				
5	Anode G3						



## 4. 7 Segment Four Digit LED Display

### 4.1 Common Anode 0.36 Inch (9.14mm)

#### PRODUCT DESCRIPTION

(1) Three Digit 0.36 Inch (9.14mm) Height	(5) Gray or black color background
(2) Low current operation	(6) Common Anode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	

#### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

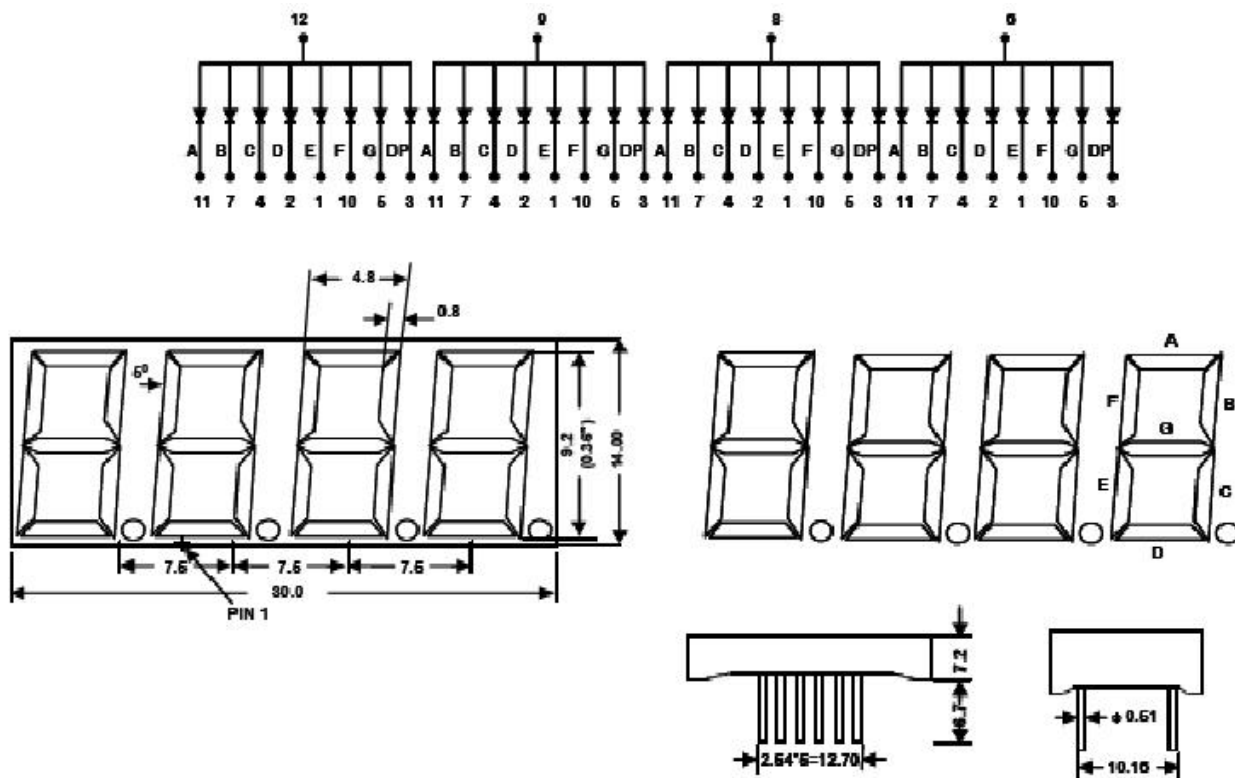
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

#### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT ( A)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDQ3632AUR11	AlGaAs Red	660	10	1.8	2.3	15,000 ucd
LEDQ3632TUR11	AlInGaP Red	660	10	1.8	2.3	30,000 ucd
LEDQ3632TB11	InGaN Blue	468	10	3.3	4.0	20,000 ucd
LEDQ3632YG11	GaP Green	568	10	1.9	2.3	15,000 ucd
LEDQ3632UY11	AlInGaP Amber	590	10	1.8	2.3	30,000 ucd
LEDQ3632TW11	InGaN White	5,500K	10	3.3	4.0	—

## DEVICE DIAGRAM

First Digit Segment				Second Digit Segment			
PIN		PIN		PIN		PIN	
1	Cathode E1	6	Cathode G1	1	Cathode E2	6	Cathode G2
2	Cathode D1	7	Cathode B1	2	Cathode D2	7	Cathode B2
3	Cathode DP1	10	Cathode F1	3	Cathode DP2	10	Cathode F2
4	Cathode C1	11	Cathode A1	4	Cathode C2	11	Cathode A2
Third Digit Segment				Fourth Digit Segment			
PIN		PIN		PIN			
1	Cathode E3	6	Cathode G3	1	Cathode E4	6	Cathode G4
2	Cathode D3	7	Cathode B3	2	Cathode D4	7	Cathode B4
3	Cathode DP3	10	Cathode F3	3	Cathode DP4	10	Cathode F4
4	Cathode C3	11	Cathode A3	4	Cathode C4	11	Cathode A4
All Digit Segment							
PIN		PIN					
5	Common Anode 5	9	Common Anode 9				
8	Common Anode 8	12	Common Anode 10				



## 4.2 Common Anode 0.56 Inch (14.20mm)

PRODUCT DESCRIPTION	
(1) Four Digit 0.56 Inch (14.20mm) Height	(5) Gray or black color background
(2) Low current operation	(6) Common Anode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	

### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

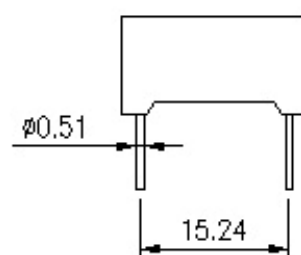
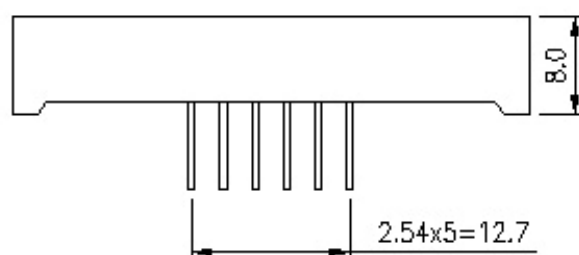
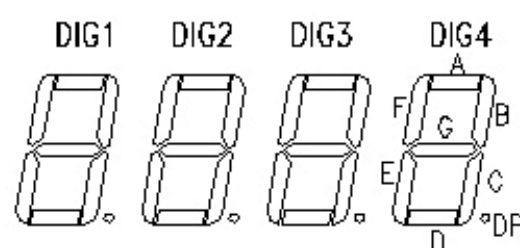
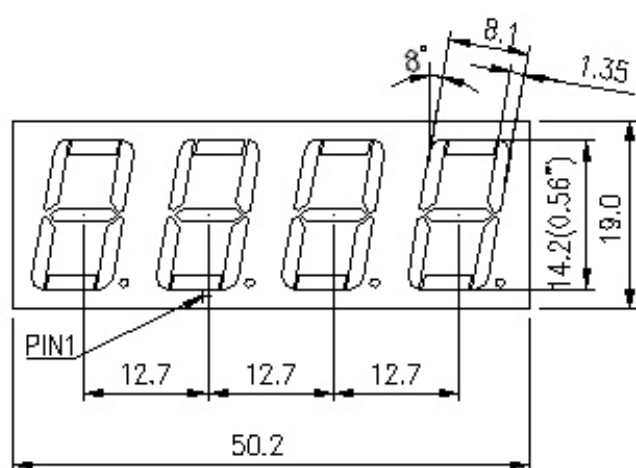
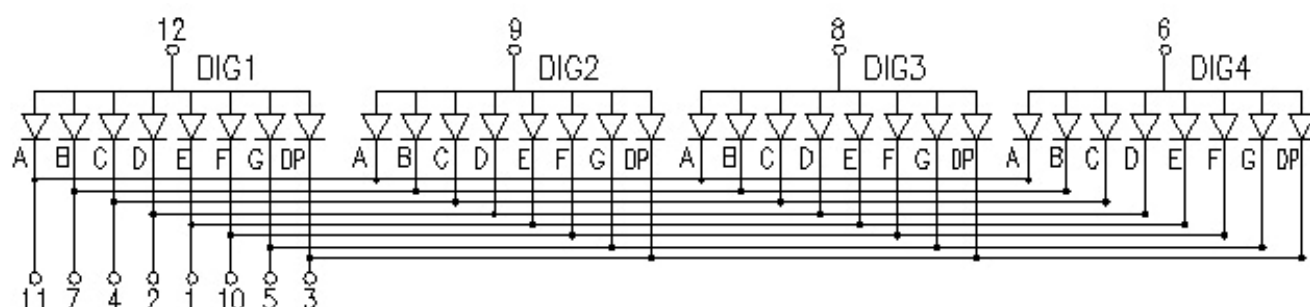
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT ( A)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 10mA)
LEDQ5642AUR11	AlGaAs Red	660	10	1.8	2.3	20,000 ucd
LEDQ5642TB11	InGaN Blue	468	10	3.3	4.0	30,000 ucd
LEDQ5642YG11	GaP Green	568	10	1.9	2.3	20,000 ucd
LEDQ5642UY11	AlInGaP Amber	590	10	1.8	2.3	22,000 ucd
LEDQ5642TW11	InGaN White	5,500K	10	3.3	4.0	30,000 ucd

## DEVICE DIAGRAM

First Digit Segment				Second Digit Segment			
PIN		PIN		PIN		PIN	
1	Cathode E1	5	Cathode G1	1	Cathode E2	5	Cathode G2
2	Cathode D1	7	Cathode B1	2	Cathode D2	7	Cathode B2
3	Cathode DP1	10	Cathode F1	3	Cathode DP2	10	Cathode F2
4	Cathode C1	11	Cathode A1	4	Cathode C2	11	Cathode A2
Third Digit Segment				Fourth Digit Segment			
PIN		PIN		PIN		PIN	
1	Cathode E3	5	Cathode G3	1	Cathode E4	5	Cathode G4
2	Cathode D3	7	Cathode B3	2	Cathode D4	7	Cathode B4
3	Cathode DP3	10	Cathode F3	3	Cathode DP4	10	Cathode F4
4	Cathode C3	11	Cathode A3	4	Cathode C4	11	Cathode A4
All Digit Segment							
PIN		PIN					
6	Common Anode 5	9	Common Anode 9				
8	Common Anode 8	12	Common Anode 10				

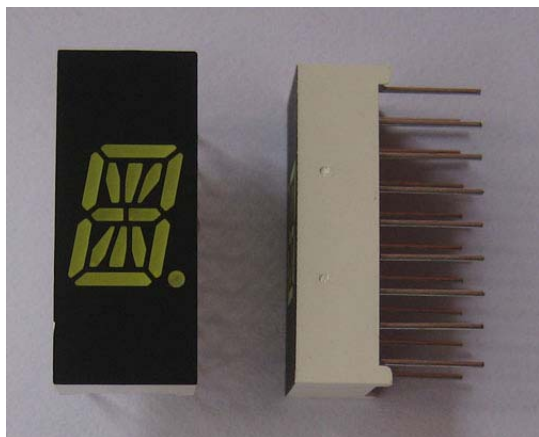


## 5. Alpha Numeric Single Digit LED Display

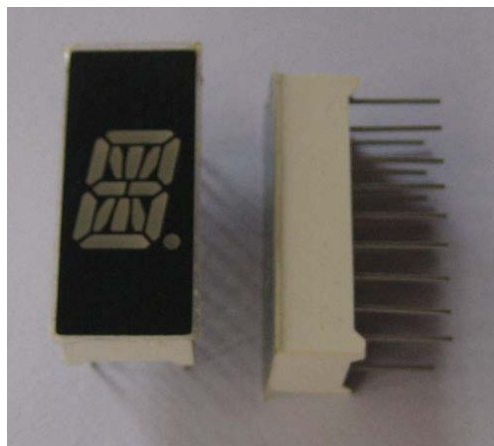
### 5.1 Common Anode 0.39 Inch (9.9mm)

#### PRODUCT DESCRIPTION

(1) 0.39 Inch (9.9mm) Height	(5) Gray or black color background
(2) Low current operation	(6) Common Anode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	



White Led display



Blue, red, yellow and green Led display

#### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

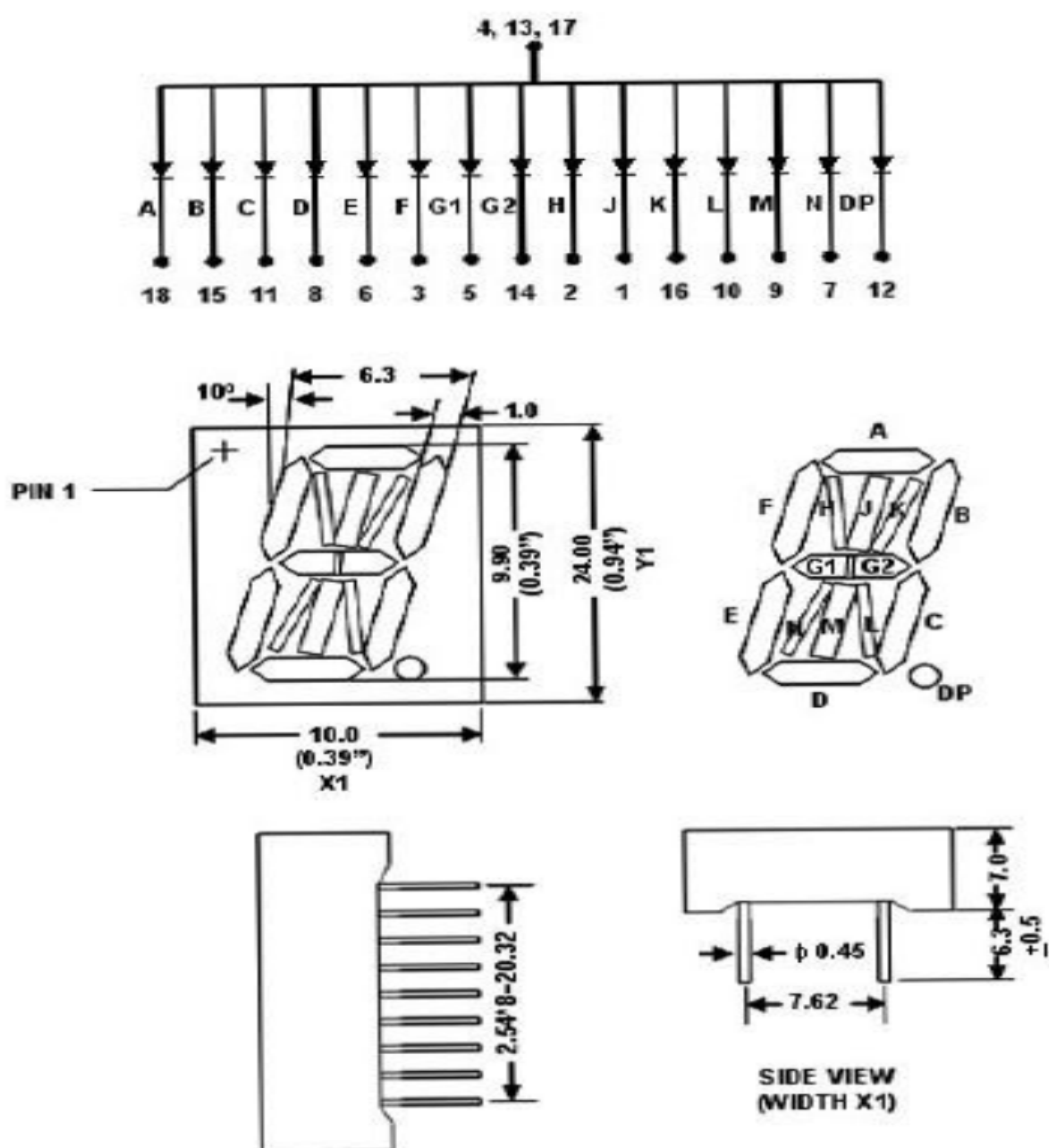
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

#### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 20mA)
LEDA3914AUR11	AlGaAs Red	660	10	1.8	2.3	25,000 ucd
LEDA3914TB11	InGaN Blue	468	10	3.3	4.0	45,000 ucd
LEDA3914YG11	GaP Green	568	10	1.9	2.3	25,000 ucd
LEDA3914UY11	AlInGaP Amber	590	10	1.8	2.3	30,000 ucd
LEDA3914TW11	InGaN White	5,500K	10	3.3	4.0	70,000 ucd

## DEVICE DIAGRAM

PIN NO.			
1	Cathode J	10	Cathode L
2	Cathode H	11	Cathode C
3	Cathode F	12	Cathode DP
4	Common Anode	13	Common Anode
5	Cathode G1	14	Cathode G2
6	Cathode E	15	Cathode B
7	Cathode N	16	Cathode K
8	Cathode D	17	Common Anode
9	Cathode M	18	Cathode A

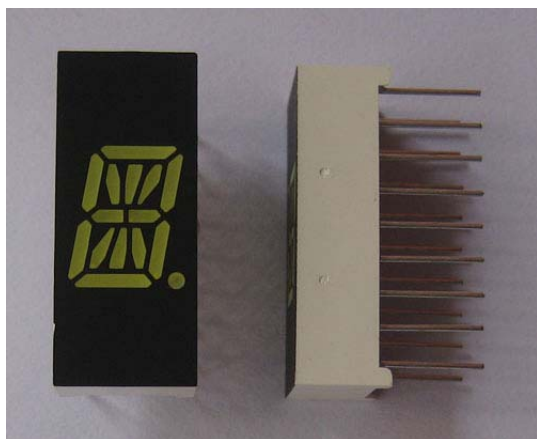




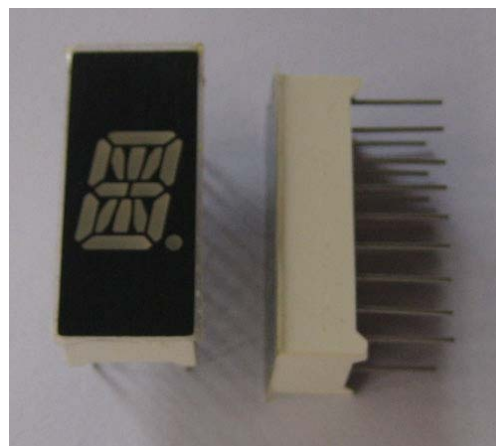
## 5.2 Common Cathode 0.39 Inch (9.9mm)

### PRODUCT DESCRIPTION

(1) 0.39 Inch (9.9mm) Height	(5) Gray or black color background
(2) Low current operation	(6) Common Cathode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	



White Led display



Blue, red, yellow and green Led display

### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

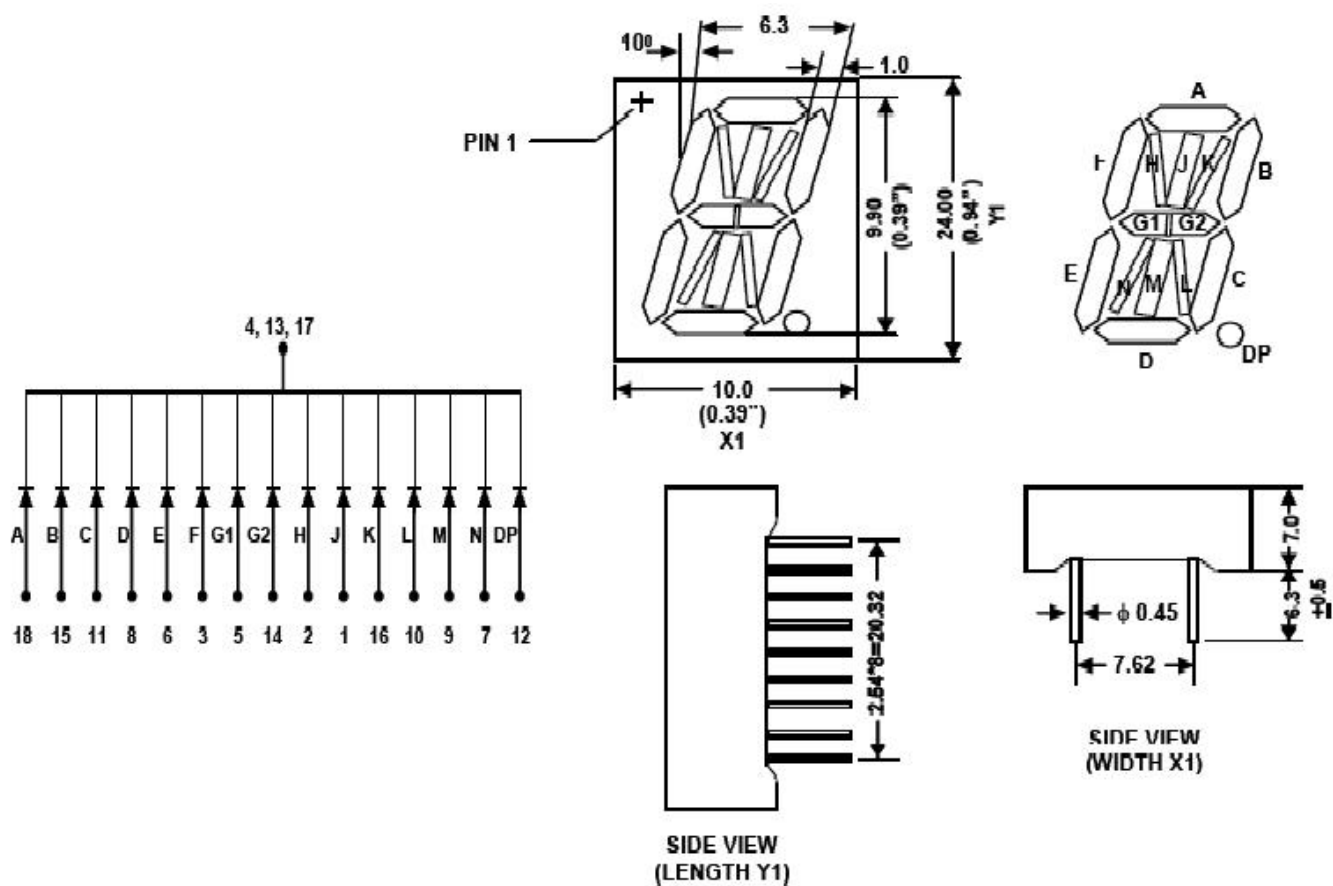
### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 20mA)
LEDA3914AUR11C	AlGaAs Red	660	10	1.8	2.3	25,000 ucd
LEDA3914TB11C	InGaN Blue	468	10	3.3	4.0	45,000 ucd
LEDA3914YG11C	GaP Green	568	10	1.9	2.3	25,000 ucd
LEDA3914UY11C	AlInGaP Amber	590	10	1.8	2.3	30,000 ucd
LEDA3914TW11C	InGaN White	5,500K	10	3.3	4.0	70,000 ucd

## DEVICE DIAGRAM

### PIN NO.

1	Anode J	10	Anode L
2	Anode H	11	Anode C
3	Anode F	12	Anode DP
4	Common Cathode	13	Common Cathode
5	Anode G1	14	Anode G2
6	Anode E	15	Anode B
7	Anode N	16	Anode K
8	Anode D	17	Common Cathode
9	Anode M	18	Anode A



### 5.3 Common Anode 0.50 Inch (12.7mm)

PRODUCT DESCRIPTION	
(1) 0.50 Inch (12.7mm) Height	(5) Gray or black color background
(2) Low current operation	(6) Common Anode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	

#### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

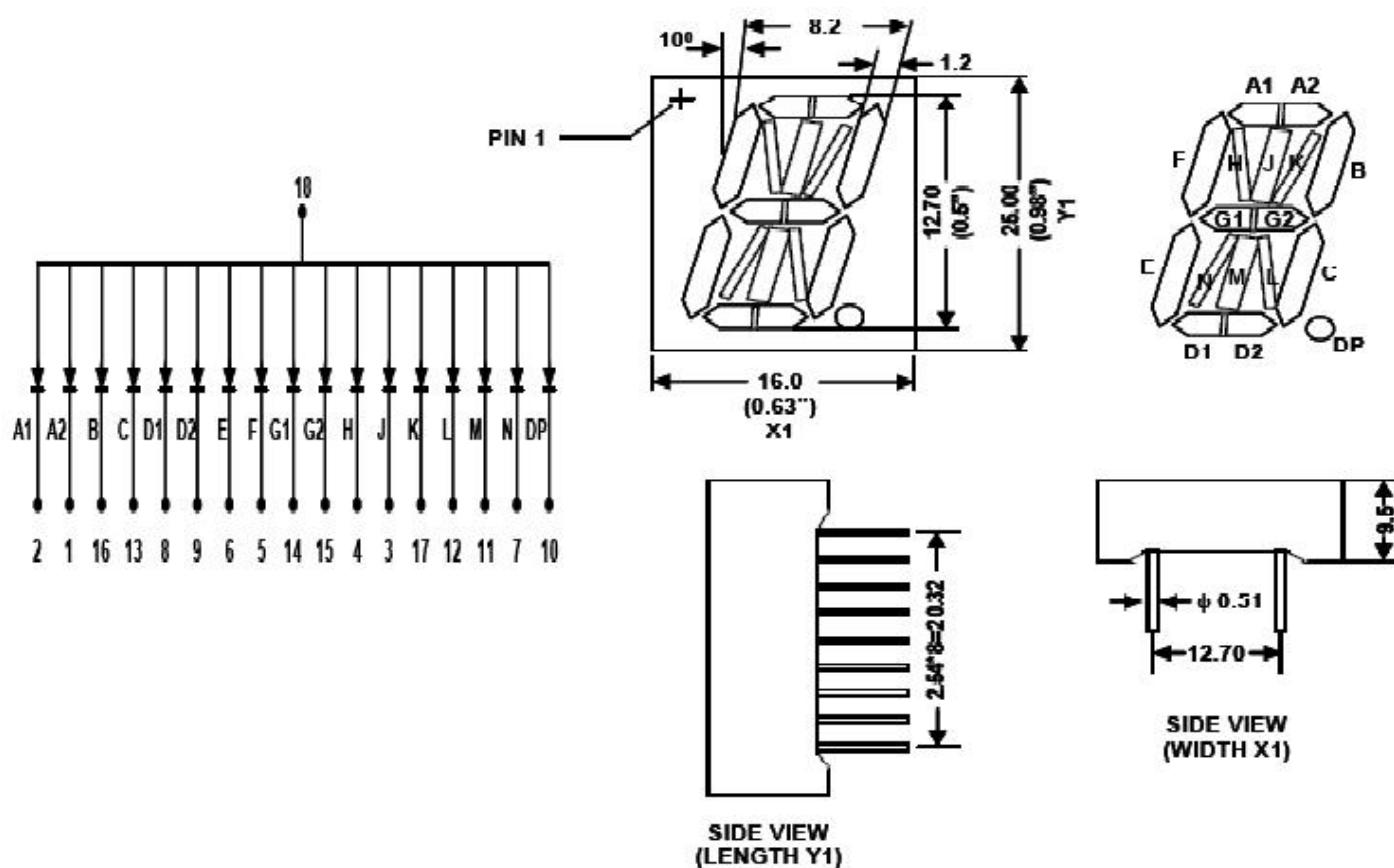
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

#### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 20mA)
LEDA5014AUR11	AlGaAs / Red	660	10	1.8	2.3	35,000 ucd
LEDA5014TB11	InGaN / Blue	468	10	3.3	4.0	45,000 ucd
LEDA5014YG11	GaP / Green	568	10	1.9	2.3	35,000 ucd
LEDA5014UY11	AlInGaP / Amber	590	10	1.8	2.3	35,000 ucd
LEDA5014TW11	InGaN / White	5,500K	10	3.3	4.0	75,000 ucd

## DEVICE DIAGRAM

PIN NO.			
1	Cathode A2	10	Cathode DP
2	Cathode A1	11	Cathode M
3	Cathode J	12	Cathode L
4	Cathode H	13	Cathode C
5	Cathode F	14	Cathode G1
6	Cathode E	15	Cathode G2
7	Cathode N	16	Cathode B
8	Cathode D1	17	Cathode K
9	Cathode D2	18	Common Anode



## 5.4 Common Cathode 0.50 Inch (12.7mm)

PRODUCT DESCRIPTION	
(1) 0.50 Inch (12.7mm) Height	(5) Gray or black color background
(2) Low current operation	(6) Common Cathode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	

### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

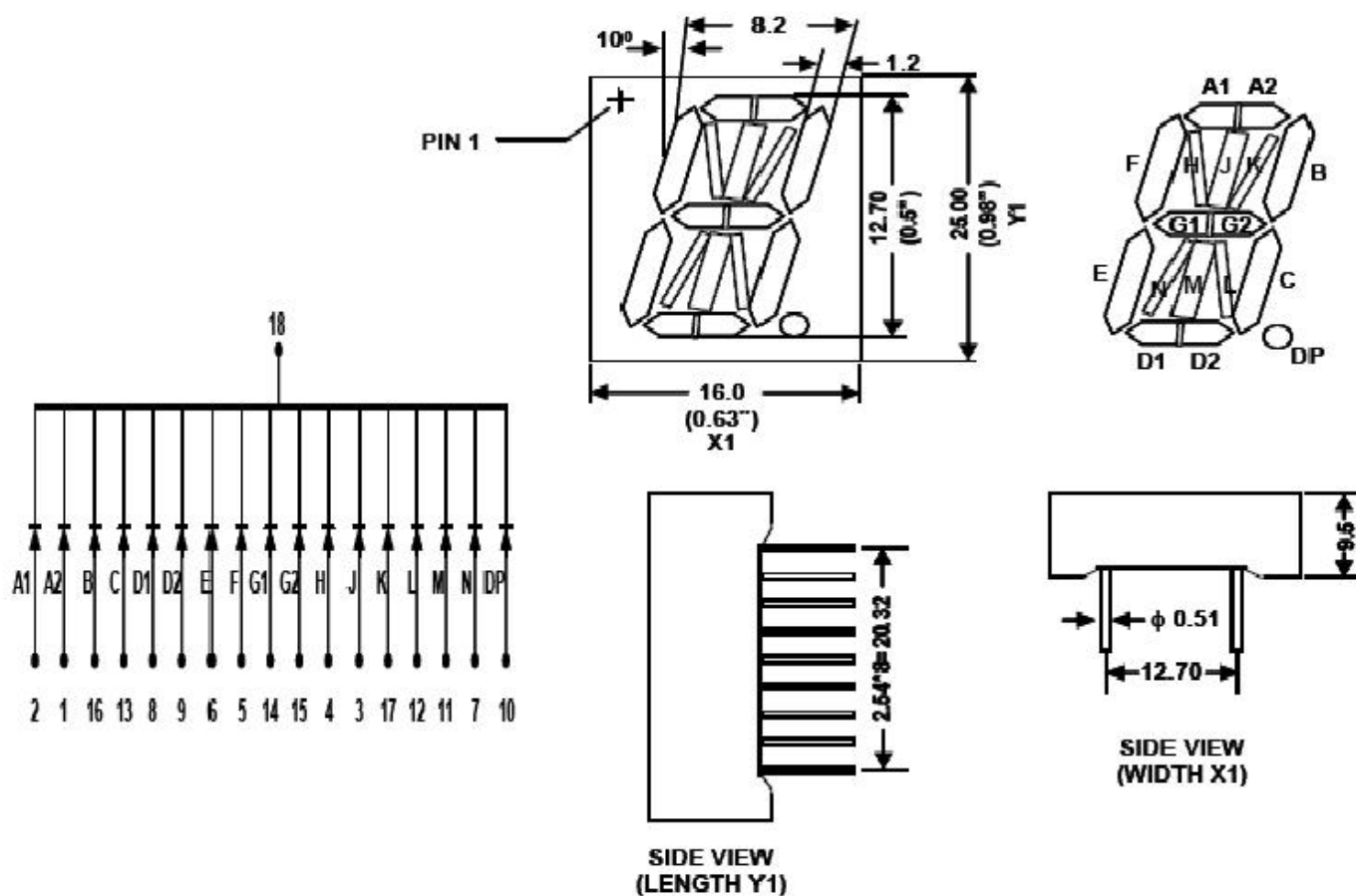
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 20mA)
LEDA5014AUR11C	AlGaAs / Red	660	10	1.8	2.3	35,000 ucd
LEDA5014TB11C	InGaN / Blue	468	10	3.3	4.0	45,000 ucd
LEDA5014YG11C	GaP / Green	568	10	1.9	2.3	35,000 ucd
LEDA5014UY11C	AlInGaP / Amber	590	10	1.8	2.3	35,000 ucd
LEDA5014TW11C	InGaN / White	5,500K	10	3.3	4.0	75,000 ucd

## DEVICE DIAGRAM

PIN NO.			
1	Anode A2	10	Anode DP
2	Anode A1	11	Anode M
3	Anode J	12	Anode L
4	Anode H	13	Anode C
5	Anode F	14	Anode G1
6	Anode E	15	Anode G2
7	Anode N	16	Anode B
8	Anode D1	17	Anode K
9	Anode D2	18	Common Cathode



## 5.5 Common Anode 0.80 Inch (20.32mm)

PRODUCT DESCRIPTION	
(1) 0.80 Inch (20.32mm) Height	(5) Gray or black color background
(2) Low current operation	(6) Common Anode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	

### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

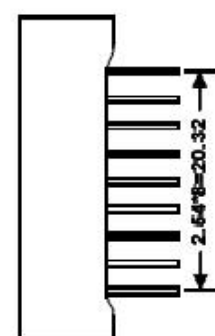
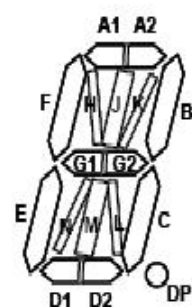
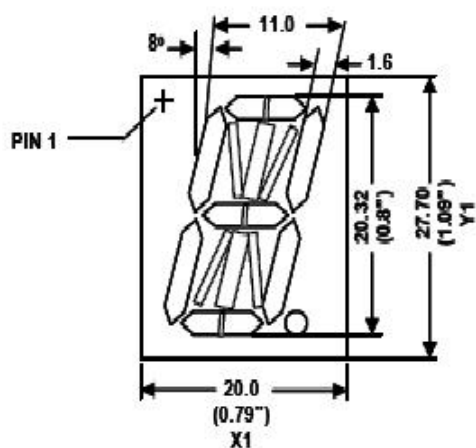
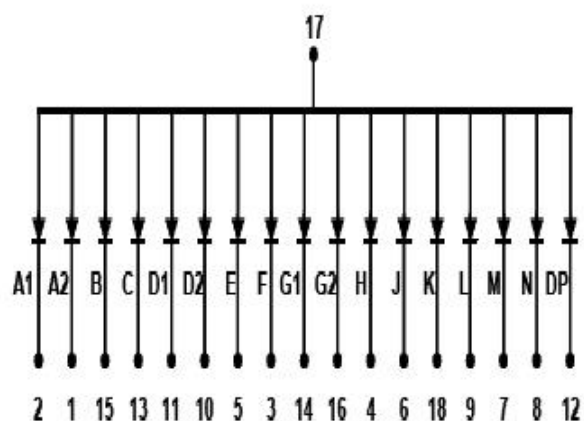
(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

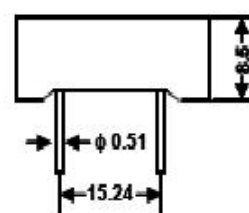
PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 20mA)
LEDA8018AUR11	AlGaAs / Red	660	10	1.8	2.3	40,000 ucd
LEDA8018TB11	InGaN / Blue	468	10	3.3	4.0	50,000 ucd
LEDA8018YG11	GaP / Green	568	10	1.9	2.3	40,000 ucd
LEDA8018UY11	AlInGaP / Amber	590	10	1.8	2.3	40,000 ucd
LEDA8018TW11	InGaN / White	5,500K	10	3.3	4.0	75,000 ucd

## DEVICE DIAGRAM

PIN NO.			
1	Cathode A2	10	Cathode D2
2	Cathode A1	11	Cathode D1
3	Cathode F	12	Cathode DP
4	Cathode H	13	Cathode C
5	Cathode E	14	Cathode G1
6	Cathode J	15	Cathode B
7	Cathode M	16	Cathode G2
8	Cathode N	17	Common Anode
9	Cathode L	18	Cathode K



SIDE VIEW  
(LENGTH Y1)



SIDE VIEW  
(WIDTH X1)



## 5.6 Common Cathode 0.80 Inch (20.32mm)

PRODUCT DESCRIPTION	
(1) 0.80 Inch (20.32mm) Height	(5) Gray or black color background
(2) Low current operation	(6) Common Cathode
(3) Excellent color and font characteristics	(7) RoHs Compliant Part
(4) Colors: White, blue, red, yellow and green	

### Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	AMBER	GREEN	BLUE	WHITE	UNITS
DC Forward Current Per Segment	30	30	25	30	20	mA
Peak Current Per Segment <sup>(1)</sup>	70	50	50	25	25	mA
Avg. Forward Current (Pulse Operation) Per Segment	30	30	25	25	25	mA
Derating Linear From 25°C Per Segment	0.3					mA/°C
Reverse Voltage <sup>(2)</sup>	3					V
Operating Temperature	-25 to +85					°C
Storage Temperature	-30 to +85					°C

(1) Pulse conditions of 1/10 duty and 0.1msec width, for long operating life, max. of 20mA recommended

(2) Reverse biasing of the dot matrix is not recommend, will cause damage to the leds

### Electro-optical Characteristics (Ta = 25°C)

PART NUMBER	DICE MATERIAL (COLOR)	PEAK WAVELENGTH (nm)	MAX. REVERSE CURRENT / SEGMENT (uA)	VF (V) TYP	VF (V) MAX.	LUMINOUS INTENSITY / SEGMENT AVERAGE (IF = 20mA)
LEDA8018AUR11C	AlGaAs / Red	660	10	1.8	2.3	40,000 ucd
LEDA8018TB11C	InGaN / Blue	468	10	3.3	4.0	50,000 ucd
LEDA8018YG11C	GaP / Green	568	10	1.9	2.3	40,000 ucd
LEDA8018UY11C	AlInGaP / Amber	590	10	1.8	2.3	40,000 ucd
LEDA8018TW11C	InGaN / White	5,500K	10	3.3	4.0	75,000 ucd

## DEVICE DIAGRAM

PIN NO.			
1	Anode A2	10	Anode D2
2	Anode A1	11	Anode D1
3	Anode F	12	Anode DP
4	Anode H	13	Anode C
5	Anode E	14	Anode G1
6	Anode J	15	Anode B
7	Anode M	16	Anode G2
8	Anode N	17	Common Cathode
9	Anode L	18	Anode K

