

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 ⁽¹⁾ | 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 ⁽²⁾ | 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 | AllnGaP 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 | AllnGaP 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 | | 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 | | | | |

