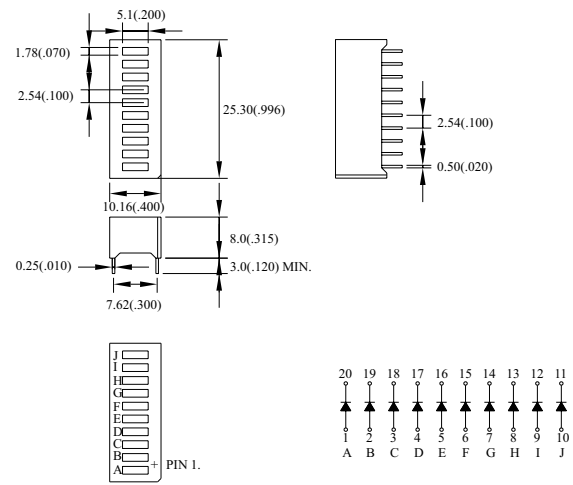
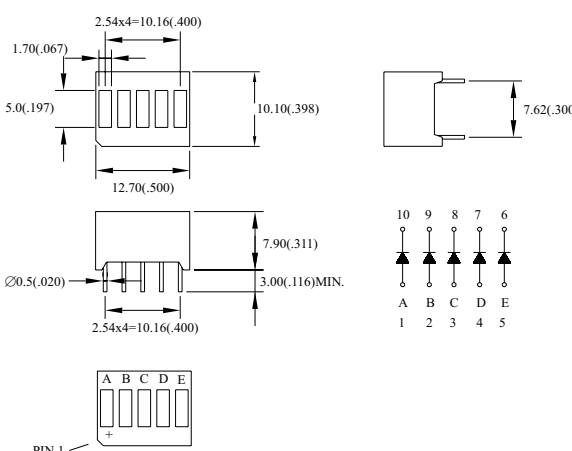
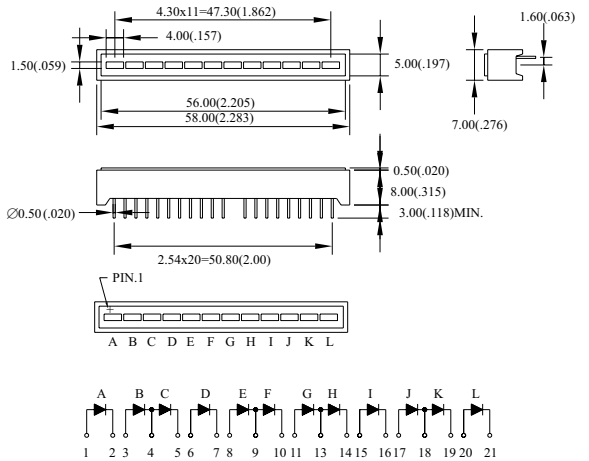
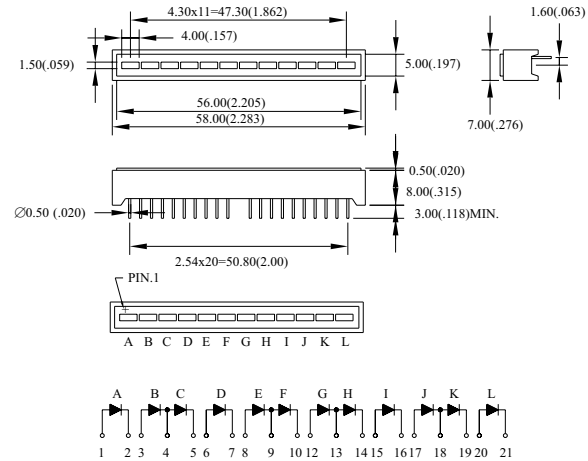
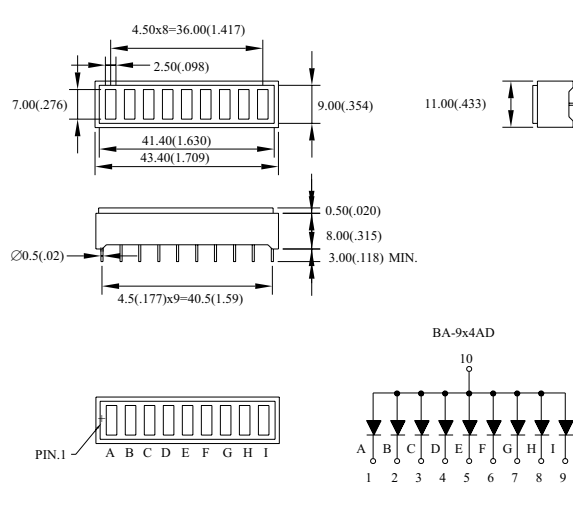
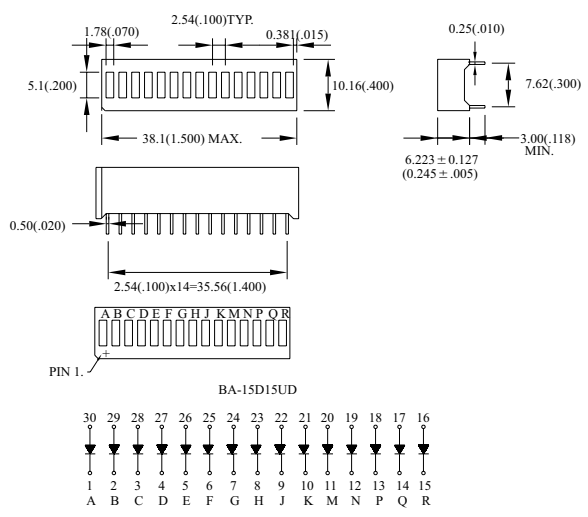




LED LIGHT BAR & BAR GRAPH ARRAYS

| Digit Size | Part No. | | Chip | | Absolute Maximum Ratings | | | | Electro-optical Data(At 10mA) | | | Drawing No. |
|-------------------------------------|----------------------|----------------------|------------------------|-----------------------------------|--------------------------|---------|---------|----------|-------------------------------|------|-------------------------|-------------|
| | Common Anode | Common Cathode | Material/Emitted Color | Peak Wave Length λ_p (nm) | $\Delta \lambda$ (nm) | Pd (mw) | If (mA) | Ifp (mA) | Vf (v) | | Iv. Typ. Per.Seg. (mcd) | |
| | | | | | | | | | Typ. | Max. | | |
| 1.78*5.10mm 10Bar Graph Array | BA-10R1UD | | GaAsP/Red | 655 | 40 | 80 | 40 | 200 | 1.7 | 2.0 | 1.4 | AD-01 |
| | BA-10H1UD | | GaP/ Bright Red | 700 | 90 | 40 | 15 | 50 | 2.2 | 2.5 | 2.0 | |
| | BA-10G1UD | | GaP/ Green | 568 | 30 | 80 | 30 | 150 | 2.2 | 2.5 | 5.0 | |
| | BA-10Y1UD | | GaAsP/GaP/ Yellow | 585 | 35 | 80 | 30 | 150 | 2.1 | 2.5 | 4.5 | |
| | BA-10E1UD | | GaAsP/GaP/ Hi-Eff.Red | 635 | 45 | 80 | 30 | 150 | 2.0 | 2.5 | 5.0 | |
| | | | GaAsP/GaP/ Orange | | | | | | | | | |
| | BA-10S1UD | | GaAlAs/ SH Super Red | 660 | 20 | 80 | 30 | 150 | 1.7 | 2.5 | 8.0 | |
| BA-10D1UD | | GaAlAs/ DH Super Red | 660 | 20 | 80 | 30 | 150 | 1.7 | 2.5 | 9.0 | | |
| 1.70*5.00mm 5Bar Graph Array | BA-5R5UD | | GaAsP/Red | 655 | 40 | 80 | 40 | 200 | 1.7 | 2.0 | 1.4 | AD-02 |
| | BA-5H5UD | | GaP/ Bright Red | 700 | 90 | 40 | 15 | 50 | 2.2 | 2.5 | 2.0 | |
| | BA-5G5UD | | GaP/ Green | 568 | 30 | 80 | 30 | 150 | 2.2 | 2.5 | 5.0 | |
| | BA-5Y5UD | | GaAsP/GaP/ Yellow | 585 | 35 | 80 | 30 | 150 | 2.1 | 2.5 | 4.5 | |
| | BA-5E5UD | | GaAsP/GaP/ Hi-Eff.Red | 635 | 45 | 80 | 30 | 150 | 2.0 | 2.5 | 5.0 | |
| | | | GaAsP/GaP/ Orange | | | | | | | | | |
| | BA-5S5UD | | GaAlAs/ SH Super Red | 660 | 20 | 80 | 30 | 150 | 1.7 | 2.5 | 8.0 | |
| BA-5D5UD | | GaAlAs/ DH Super Red | 660 | 20 | 80 | 30 | 150 | 1.7 | 2.5 | 9.0 | | |
| 1.50*4.00mm 12Bar Graph Array | BA-12R3UD | | GaAsP/Red | 655 | 40 | 80 | 40 | 200 | 1.7 | 2.0 | 1.2 | AD-03 |
| | BA-12H3UD | | GaP/ Bright Red | 700 | 90 | 40 | 15 | 50 | 2.2 | 2.5 | 1.8 | |
| | BA-12G3UD | | GaP/ Green | 568 | 30 | 80 | 30 | 150 | 2.2 | 2.5 | 4.5 | |
| | BA-12Y3UD | | GaAsP/GaP/ Yellow | 585 | 35 | 80 | 30 | 150 | 2.1 | 2.5 | 3.5 | |
| | BA-12E3UD | | GaAsP/GaP/ Hi-Eff.Red | 635 | 45 | 80 | 30 | 150 | 2.0 | 2.5 | 4.5 | |
| | | | GaAsP/GaP/ Orange | | | | | | | | | |
| | BA-12S3UD | | GaAlAs/ SH Super Red | 660 | 20 | 80 | 30 | 150 | 1.7 | 2.5 | 10.0 | |
| BA-12D3UD | | GaAlAs/ DH Super Red | 660 | 20 | 80 | 30 | 150 | 1.7 | 2.5 | 12.0 | | |
| 1.50*4.00mm 12Bar Graph Array | BA-12R3UD-A | | GaAsP/Red | 655 | 40 | 80 | 40 | 200 | 1.7 | 2.0 | 1.2 | AD-04 |
| | BA-12H3UD-A | | GaP/ Bright Red | 700 | 90 | 40 | 15 | 50 | 2.2 | 2.5 | 1.8 | |
| | BA-12G3UD-A | | GaP/ Green | 568 | 30 | 80 | 30 | 150 | 2.2 | 2.5 | 4.5 | |
| | BA-12Y3UD-A | | GaAsP/GaP/ Yellow | 585 | 35 | 80 | 30 | 150 | 2.1 | 2.5 | 3.5 | |
| | BA-12E3UD-A | | GaAsP/GaP/ Hi-Eff.Red | 635 | 45 | 80 | 30 | 150 | 2.0 | 2.5 | 4.5 | |
| | | | GaAsP/GaP/ Orange | | | | | | | | | |
| | BA-12S3UD-A | | GaAlAs/ SH Super Red | 660 | 20 | 80 | 30 | 150 | 1.7 | 2.5 | 10.0 | |
| BA-12D3UD-A | | GaAlAs/ DH Super Red | 660 | 20 | 80 | 30 | 150 | 1.7 | 2.5 | 12.0 | | |
| 2.50*7.00mm 9Bar Graph Array | BA-9R4AD | BA-9R4CD | GaAsP/Red | 655 | 40 | 80 | 40 | 200 | 1.7 | 2.0 | 1.2 | AD-05 |
| | BA-9H4AD | BA-9H4CD | GaP/ Bright Red | 700 | 90 | 40 | 15 | 50 | 2.2 | 2.5 | 1.8 | |
| | BA-9G4AD | BA-9G4CD | GaP/ Green | 568 | 30 | 80 | 30 | 150 | 2.2 | 2.5 | 4.5 | |
| | BA-9Y4AD | BA-9Y4CD | GaAsP/GaP/ Yellow | 585 | 35 | 80 | 30 | 150 | 2.1 | 2.5 | 3.5 | |
| | BA-9E4AD BA-9E4CD | | GaAsP/GaP/ Hi-Eff.Red | 635 | 45 | 80 | 30 | 150 | 2.0 | 2.5 | 4.5 | |
| | | | GaAsP/GaP/ Orange | | | | | | | | | |
| | BA-9S4AD | BA-9S4CD | GaAlAs/ SH Super Red | 660 | 20 | 80 | 30 | 150 | 1.7 | 2.5 | 10.0 | |
| BA-9D4AD | BA-9D4CD | GaAlAs/ DH Super Red | 660 | 20 | 80 | 30 | 150 | 1.7 | 2.5 | 12.0 | | |
| 1.78*5.10mm 15Bar Graph Array | BA-15R15UD | | GaAsP/Red | 655 | 40 | 80 | 40 | 200 | 1.7 | 2.0 | 1.2 | AD-06 |
| | BA-15H15UD | | GaP/ Bright Red | 700 | 90 | 40 | 15 | 50 | 2.2 | 2.5 | 1.8 | |
| | BA-15G15UD | | GaP/ Green | 568 | 30 | 80 | 30 | 150 | 2.2 | 2.5 | 4.5 | |
| | BA-15Y15UD | | GaAsP/GaP/ Yellow | 585 | 35 | 80 | 30 | 150 | 2.1 | 2.5 | 3.5 | |
| | BA-15E15UD | | GaAsP/GaP/ Hi-Eff.Red | 635 | 45 | 80 | 30 | 150 | 2.0 | 2.5 | 4.5 | |
| | | | GaAsP/GaP/ Orange | | | | | | | | | |
| | BA-15S15UD | | GaAlAs/ SH Super Red | 660 | 20 | 80 | 30 | 150 | 1.7 | 2.5 | 10.0 | |
| BA-15D15UD | | GaAlAs/ DH Super Red | 660 | 20 | 80 | 30 | 150 | 1.7 | 2.5 | 12.0 | | |

LED LIGHT BAR & BAR GRAPH ARRAYS

| AD-01 BA- 10x1UD | AD-02 BA- 5x5UD |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>Dimensions: 5.1(200), 1.78(070), 2.54(100), 25.30(996), 10.16(400), 0.25(.010), 7.62(300), 8.0(315), 3.0(.120) MIN., 2.54(100), 0.50(.020).</p> <p>Pin layout: 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1. PIN 1.</p> |  <p>Dimensions: 2.54x4=10.16(400), 1.70(.067), 5.0(.197), 12.70(.500), 10.10(.398), 7.62(300), 7.90(.311), 3.00(.116) MIN., 2.54x4=10.16(400), Ø0.5(.020).</p> <p>Pin layout: 10, 9, 8, 7, 6, 5, 4, 3, 2, 1. PIN 1.</p> |
| AD-03 BA- 12x3UD | AD-04 BA- 12x3UD-A |
|  <p>Dimensions: 4.30x11=47.30(1.862), 1.50(.059), 4.00(.157), 5.00(.197), 7.00(.276), 1.60(.063), 56.00(2.205), 58.00(2.283), 0.50(.020), 8.00(.315), 3.00(.118) MIN., 2.54x20=50.80(2.00), Ø0.50(.020).</p> <p>Pin layout: A, B, C, D, E, F, G, H, I, J, K, L. NP: 12.</p> |  <p>Dimensions: 4.30x11=47.30(1.862), 1.50(.059), 4.00(.157), 5.00(.197), 7.00(.276), 1.60(.063), 56.00(2.205), 58.00(2.283), 0.50(.020), 8.00(.315), 3.00(.118) MIN., 2.54x20=50.80(2.00), Ø0.50(.020).</p> <p>Pin layout: A, B, C, D, E, F, G, H, I, J, K, L. NP: 11.</p> |
| AD-05 BA-9x4 ^A _C D | AD-06 BA- 15x15UD |
|  <p>Dimensions: 4.50x8=36.00(1.417), 7.00(.276), 2.50(.098), 9.00(.354), 11.00(.433), 41.40(1.630), 43.40(1.709), 0.50(.020), 8.00(.315), 3.00(.118) MIN., 4.5(.177)x9=40.5(1.59), Ø0.5(.02).</p> <p>Pin layout: A, B, C, D, E, F, G, H, I. PIN 1.</p> |  <p>Dimensions: 1.78(070), 2.54(100) TYP., 0.38(.015), 0.25(.010), 5.1(200), 10.16(400), 38.1(1.500) MAX., 7.62(300), 6.223 ± 0.127 (0.245 ± .005), 3.00(.118) MIN., 0.50(.020), 2.54(100)x14=35.56(1.400).</p> <p>Pin layout: A, B, C, D, E, F, G, H, J, K, M, N, P, Q, R. PIN 1.</p> |

NOTES: 1.All Dimensions are in millimeters(inches).
3.Specifications are subject to change without notice.

2.Tolerance is ± 0.25mm(.010").
4.NP:No Pin. 5.NC:No Connect.