



Product Group: Vishay Semiconductors, LEDs / August 2013

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New VDMx10x0 and VDMx10A1 Series of SMD 7-Segment LED Displays

The News:

Vishay Intertechnology Announces New 10 mm Standard SMD 7-Segment LED Displays With Low Profiles Down to 2.1 mm

Vishay Intertechnology, Inc. (NYSE: VSH) announces two new series of 10 mm standard surfacemount 7-segment LED displays in compact, low-profile packages with high luminous intensity to 2750 µcd for a wide range of applications.

Product Benefits:

- Utilize AllnGap on GaAs chip technology
 - Provides high luminous intensity up to 2750 µcd typ.
- Available in super red, soft orange, yellow, and green
- Offer evenly lighted, untinted segments and grey package surfaces
- Low package heights
 - VDMx10A1: 2.1 mm
 - VDMx10x0: 3.75 mm
- Available in common anode and cathode configurations
- ± 50° angle of half intensity
- Maximum forward voltage of 2.6 V for low power consumption
- Suitable for high peak currents up to 60 mA per segment
- Grouped by luminous intensity
- Yellow, green, and soft orange displays categorized by color
- RoHS compliant
- Compatible with IR-reflow soldering processes
- Preconditioned according to JEDEC Level 3





New Product Info



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The Key Specifications:

| Part # | Color | Luminous intensity | @I _F (mA) | Wavelength typ. (nm) | @ I _F (mA) | Circuitry |
|----------|-------------|--------------------|-------------------------|----------------------|--------------------------|----------------|
| | | min/typ (µcd) | (11174) | typ. (IIII) | (11174) | |
| VDMR10A0 | Super red | 180 / 650 | 1 | 631 | 20 | Common anode |
| VDMR10C0 | Super red | 180 / 650 | 1 | 631 | 20 | Common cathode |
| VDMO10A0 | Soft orange | 180 / 650 | 1 | 605 | 20 | Common anode |
| VDMO10C0 | Soft orange | 180 / 650 | 1 | 605 | 20 | Common cathode |
| VDMY10A0 | Yellow | 1100 / 2750 | 1 | 589 | 20 | Common anode |
| VDMY10C0 | Yellow | 1100 / 2750 | 1 | 589 | 20 | Common cathode |
| VDMG10A0 | Green | 110 / 400 | 1 | 572 | 20 | Common anode |
| VDMG10C0 | Green | 110 / 400 | 1 | 572 | 20 | Common cathode |
| VDMR10A1 | Super red | 450 / 1600 | 1 | 631 | 20 | Common anode |
| VDMO10A1 | Soft orange | 180 / 650 | 1 | 605 | 20 | Common anode |
| VDMY10A1 | Yellow | 450 / 1600 | 1 | 587 | 20 | Common anode |
| VDMG10A1 | Green | 110 / 500 | 1 | 572 | 20 | Common anode |

Market Applications:

Control units and panel meters for test and measurement equipment, point-of-sale terminals, telecom systems, office equipment, consumer electronics, and medical equipment

The Perspective:

Utilizing AllnGap on GaAs chip technology for high luminous intensity up to a typical value of 2750 µcd, the VDMx10x0 and VDMx10A1 series displays provide designers with an alternative to leaded 7-segment displays in control units and panel meters for any device offering numeric digital readouts. LED displays in the VDMx10A1 series feature common anode configurations and very low package heights of 2.1 mm. VDMx10x0 series devices are available in both common anode and cathode configurations and offer package heights of 3.75 mm.

Availability: Samples and production quantities of the VDMx10x0 and VDMx10A1 series are available now, with lead times of six weeks for larger orders.

To access the product datasheets on the Vishay Web site, go to http://www.vishay.com/doc?84196 (VDMR10.0, VDMO10.0, VDMY10.0, VDMG10.0) http://www.vishay.com/doc?84197 (VDMR10A1, VDMO10A1, VDMY10A1, VDMG10A1)

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