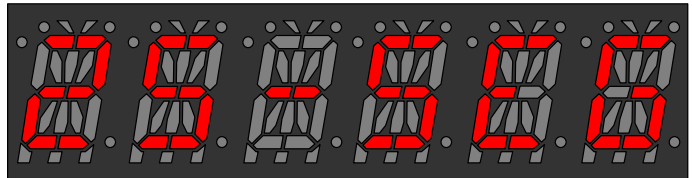


DYSR00P401101



6 digits - 25 segments per digit Common Anode Display RED

These displays are designed to implement high flexibility, providing six digits with twenty five segments per digit option to the designer. Sixteen segments implements the core digit pattern and nine more implements dots, commas e.t.c. Total character size of 12,7mm (½ inch) provides excellent reading capability. In addition these displays have very good viewing angle performance. Combining these features with high reliability and compact construction, makes it an excellent choice for digital alphanumeric readout applications. Emission resides in bright red colour with excellent luminosity and readability under bright ambient light. It has very low power consumption (30mW per segment average at 20mA forward excitation) and while driven in multiplexed mode can give a very good power performance to any application. These devices are also RoHS compliant.

Features:

- 12,7 mm (0,5 in) digit height
- Excellent segment uniformity
- Excellent luminosity
- Excellent readability under bright ambient light
- Standard size
- Low power consumption
- Compact construction
- High reliability
- RoHS compliant

Description:

- Multiplexed common anode display
- 16 segments for character representation
- 9 additional segments for dots, commas e.t.c.
- Gray segments on black surface

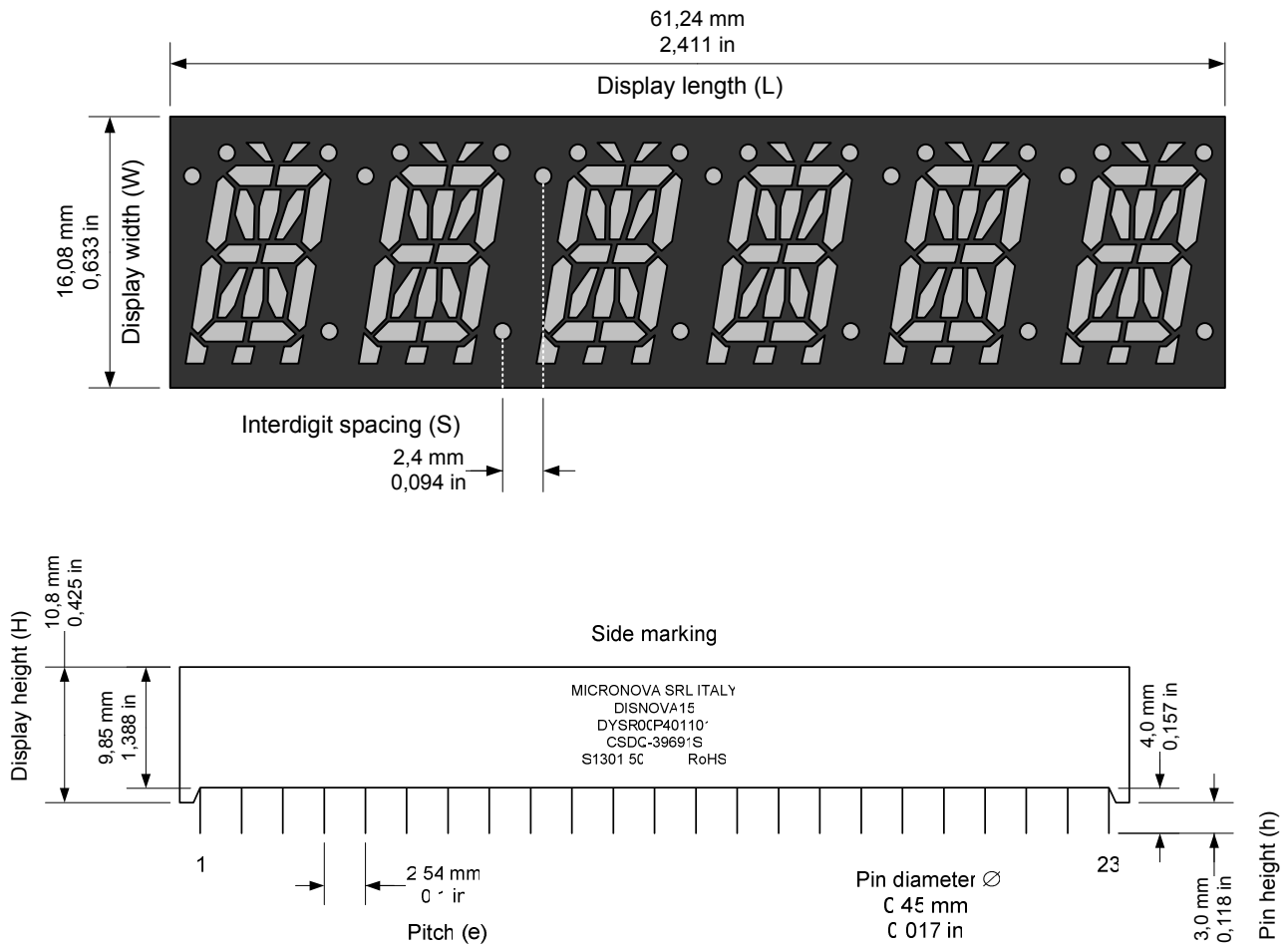
Applications:

- Digital readout display
- Instrument panels
- Alphanumeric panels
- A/V equipment
- Home appliance equipment

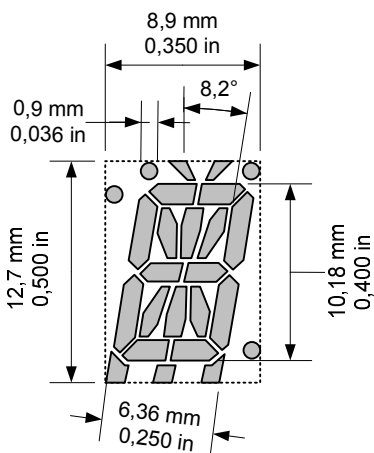
Absolute maximum ratings at Ta = 25 °C

Parameters	Symbol	Value	Unit
Power dissipation per segment	P _D	100	mW
Peak forward current per segment (1/10 Duty Cycle, 0.1ms pulse width)	I _{FP}	50	mA
Forward current per segment	I _F	25	mA
Reverse voltage	V _R	5	V
Operating temperature	T _{op}	-40 to +80	°C
Soldering temperature	T _{sl}	260 °C for 5 sec	

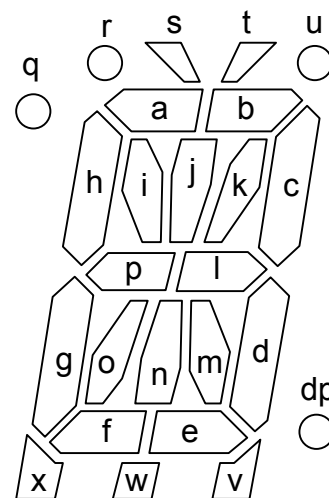
Package dimensions



Digit dimensions and segment layout

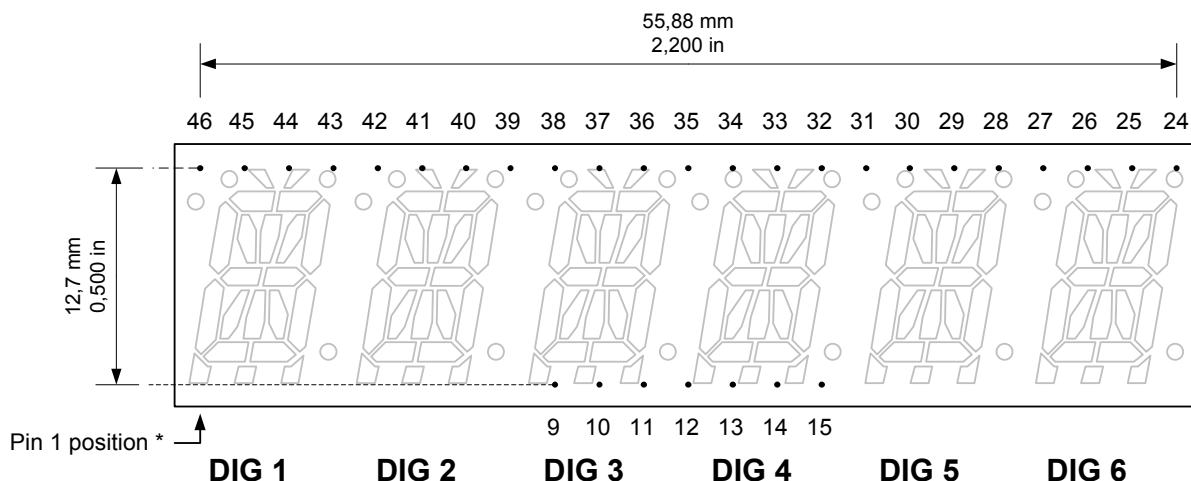


Digit dimensions



Segment layout and identification

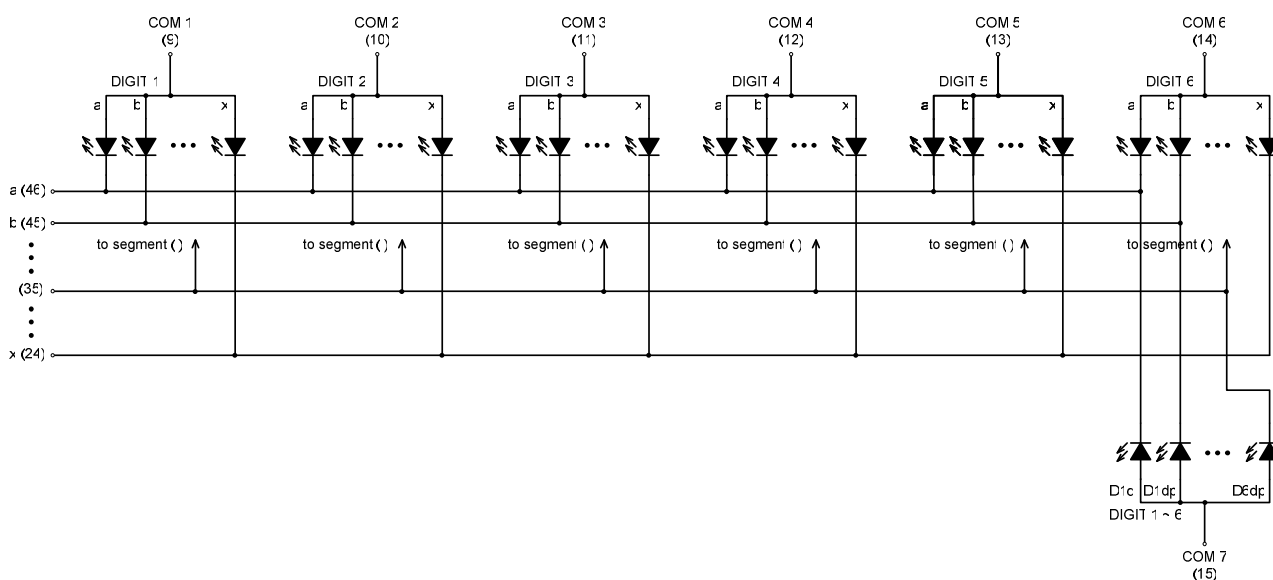
Digit and pin arrangement



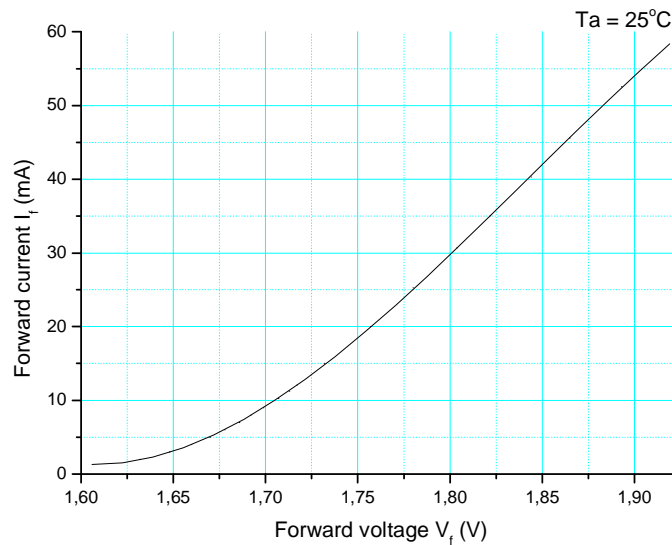
* **NOTE:** Pins 1 to 8 and 16 to 23 are missing

Pin assignment

PIN	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
9	D1x	D1w	D1v	D1u	D1t	D1s	D1r	D1p	D1o	D1n	D1m	D1l	D1k	D1j	D1i	D1h	D1g	D1f	D1e	D1d	D1c	D1b	D1a
10	D2x	D2w	D2v	D2u	D2t	D2s	D2r	D2p	D2o	D2n	D2m	D2l	D2k	D2j	D2i	D2h	D2g	D2f	D2e	D2d	D2c	D2b	D2a
11	D3x	D3w	D3v	D3u	D3t	D3s	D3r	D3p	D3o	D3n	D3m	D3l	D3k	D3j	D3i	D3h	D3g	D3f	D3e	D3d	D3c	D3b	D3a
12	D4x	D4w	D4v	D4u	D4t	D4s	D4r	D4p	D4o	D4n	D4m	D4l	D4k	D4j	D4i	D4h	D4g	D4f	D4e	D4d	D4c	D4b	D4a
13	D5x	D5w	D5v	D5u	D5t	D5s	D5r	D5p	D5o	D5n	D5m	D5l	D5k	D5j	D5i	D5h	D5g	D5f	D5e	D5d	D5c	D5b	D5a
14	D6x	D6w	D6v	D6u	D6t	D6s	D6r	D6p	D6o	D6n	D6m	D6l	D6k	D6j	D6i	D6h	D6g	D6f	D6e	D6d	D6c	D6b	D6a
15	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	D6dp	D6q	D5dp	D5q	D4dp	D4q	D3dp	D3q	D2dp	D2q	D1dp	D1q



Internal electrical connections



Forward Current vs. Forward Voltage

Please read the following notes before using the devices:

1. **Over current proof:** Current limiting resistors must be applied to the segment lines for protection, otherwise slight voltage drifts will cause unpredictable current change destroying the device.
2. **Current limiting resistors:** Current limiting resistors (an amount of 23) must be applied only to the segment lines, otherwise segment luminosity will change according to the number of emitting segments due to voltage drop across the resistor.
3. **Multiplexing:** Designer have to make a compromise between multiplexing frequency, pulse duty cycle, desired luminosity and resistor values with respect to maximum ratings.
4. **Soldering precautions:** Pb – free solder temperature profile, reflow soldering should not be done more than two times.
5. **Soldering Iron:** Use tip temperature less than 260°C for 5 seconds. Be very careful because product damage often starts at the time of hand soldering.
6. **ESD precautions:** Static electricity and discharge surges can damage LEDs. It is recommended to take all ESD precautions when handling the LED.