



- XD-5035R LED Profile Recessed
- 6063 anodised aluminium LED profile, also available in matt black
- 50mm x 35mm x 2500mm
- Opal PC diffuser with 91.09% light emittance
- Sold separately in lengths of 2500mm with 3 x clips and 2 x end cap pair
- Large range of LED strip options
- 180deg and 90deg joiners

Aluminum 6063-T5

| Component | Wt. % | Component | Wt. % | Component | Wt. % |
|-----------|----------|--------------|------------|-----------|-----------|
| Al | Max 97.5 | Mg | 0.45 - 0.9 | Si | 0.2 - 0.6 |
| Cr | Max 0.1 | Mn | Max 0.1 | Ti | Max 0.1 |
| Cu | Max 0.1 | Other, each | Max 0.05 | Zn | Max 0.1 |
| Fe | Max 0.35 | Other, total | Max 0.15 | | |

| Physical Properties | Metric | English | Comments |
|---------------------|--------------------------|---------------------------|-------------|
| Density | 2.7 g/cc | 0.0975 lb/in ³ | AA; Typical |

Mechanical Properties

| | | | |
|---------------------------|--------------------------|-----------|--|
| Hardness, Brinell | 60 | 60 | AA; Typical; 500 g load; 10 mm ball |
| Ultimate Tensile Strength | 186 MPa | 27000 psi | AA; Typical |
| Tensile Yield Strength | 145 MPa | 21000 psi | AA; Typical |
| Elongation at Break | 12 % | 12 % | AA; Typical; 1/16 in. (1.6 mm) Thickness |
| Modulus of Elasticity | 68.9 GPa | 10000 ksi | AA; Typical; Average of tension and compression. Compression modulus is about 2% greater than tensile modulus. |
| Poisson's Ratio | 0.33 | 0.33 | |
| Fatigue Strength | 68.9 MPa | 10000 psi | AA; 500,000,000 cycles completely reversed stress; RR Moore machine/specimen |
| Shear Modulus | 25.8 GPa | 3740 ksi | |
| Shear Strength | 117 MPa | 17000 psi | AA; Typical |

Electrical Properties

| | | | |
|------------------------|----------------------------------|------------------|---------------------|
| Electrical Resistivity | 3.16e-006 ohm-cm | 3.49e-006 ohm-cm | AA; Typical at 68°F |
|------------------------|----------------------------------|------------------|---------------------|

Thermal Properties

| | | | |
|----------------------|------------------------------|------------------------------------|---|
| CTE, linear 68°F | 23.4 μm/m-°C | 13 μin/in-°F | AA; Typical; Average over 68-212°F range. |
| CTE, linear 250°C | 25.6 μm/m-°C | 14.2 μin/in-°F | Average over the range 20-300°C |
| Heat Capacity | 0.9 J/g-°C | 0.215 BTU/lb-°F | |
| Thermal Conductivity | 209 W/m-K | 1450 BTU-in/hr-ft ² -°F | AA; Typical at 77°F |
| Melting Point | 616 - 654 °C | 1140 - 1210 °F | AA; Typical range based on typical composition for wrought products 1/4 inch thickness or greater |
| Solidus | 616 °C | 1140 °F | AA; Typical |
| Liquidus | 654 °C | 1210 °F | AA; Typical |

Processing Properties

| | | | |
|-----------------------|------------------------|--------|--|
| Annealing Temperature | 413 °C | 775 °F | hold at temperature for 2 to 3 hr; cool at 50 °F per hour from 775 to 500 °F |
| Solution Temperature | 521 °C | 970 °F | |
| Aging Temperature | 182 °C | 360 °F | hold at temperature for 1 hr |

Polycarbonate (PC), pellets

- (f1) - Suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.
- (f2) - Subjected to one or more of the following tests: Ultraviolet Light, Water Exposure or Immersion in accordance with UL 746C, where the acceptability for outdoor use is to be determined by UL.
- (z) - Material designation and color code may be followed by up to three letters and/or three numbers (does not include grades which are separately recognized with above material designation and suffix)
- + - Material designations may be followed by a six digit numerical code denoting color.

| Flammability | Value | Test Method |
|---------------------------------------|-----------------|-------------------------------|
| Flame Rating | | |
| 1.50 mm, ALL | HB | UL 94 |
| 3.00 mm, ALL | HB | UL 94 |
| 6.00 mm, ALL | HB | UL 94 |
| 0.750 to 1.40 mm, ALL | V-2 | UL 94 IEC 60695-11-10, -20 |
| 3.00 mm, ALL | HB40 | IEC 60695-11-10, -20 |
| 6.00 mm, ALL | HB40 | IEC 60695-11-10, -20 |
| 1.50 mm, ALL | HB75 | IEC 60695-11-10, -20 |
| Electrical | Value | Test Method |
| Hot-wire Ignition (HWI) | | UL 746 |
| 1.50 mm | PLC 3 | |
| 3.00 mm | PLC 2 | |
| 6.00 mm | PLC 0 | |
| High Amp Arc Ignition (HAI) | | UL 746 |
| 1.50 mm | PLC 0 | |
| 3.00 mm | PLC 0 | |
| 6.00 mm | PLC 0 | |
| Comparative Tracking Index (CTI) | PLC 2 | UL 746 |
| Dielectric Strength | 23 kV/mm | ASTM D149 IEC 60243-1 |
| High Voltage Arc Tracking Rate (HVTR) | PLC 0 | UL 746 |
| Volume Resistivity | 1.0E+16 ohms-cm | ASTM D257 IEC 60093 |
| Arc Resistance | PLC 6 | ASTM D495 |
| Thermal | Value | Test Method |
| RTI Elec | | UL 746 |
| 1.50 mm | 125 °C | |
| 3.00 mm | 125 °C | |
| 6.00 mm | 125 °C | |
| RTI Imp | | UL 746 |
| 1.50 mm | 115 °C | |
| 3.00 mm | 115 °C | |
| 6.00 mm | 115 °C | |
| Thermal | Value | Test Method |
| RTI Str | | UL 746 |
| 1.50 mm | 125 °C | |
| 3.00 mm | 125 °C | |
| 6.00 mm | 125 °C | |
| Physical | Value | Test Method |
| Dimensional Stability | 0.0 % | ASTM D1042 ISO 2796 |
| Outdoor Suitability | f2, f1 | UL 746C |

