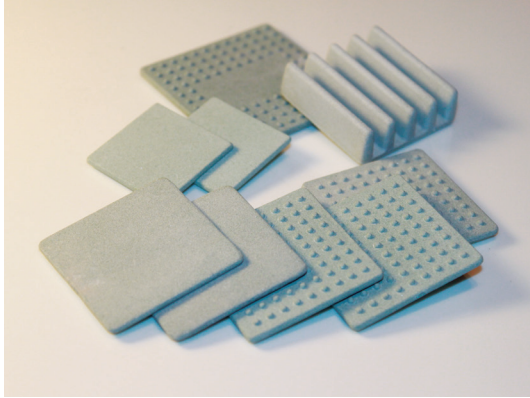


XL-25 with Li-98

Ceramic Heat Spreader with Thermal Tape



XL-25 Features

- Large contact area
- Low weight
- High breakdown voltage
- Excellent heat spreader
- Custom shapes possible

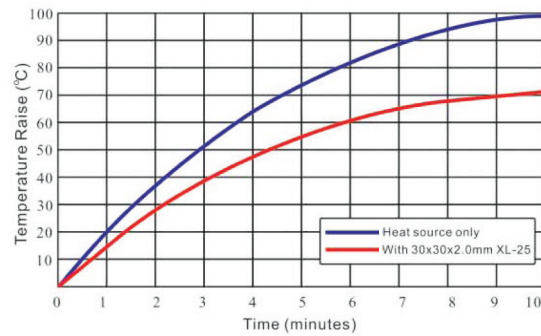
Applications

LED / Notebook PC / M/B / Power Transistor / Power Module / CPU / Chip IC

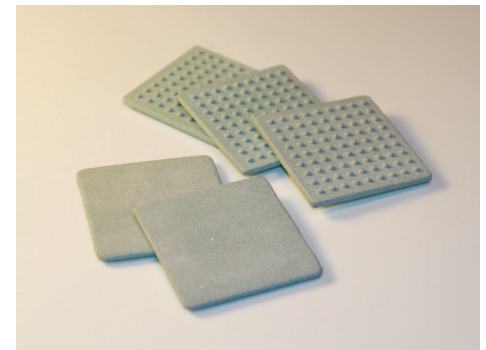
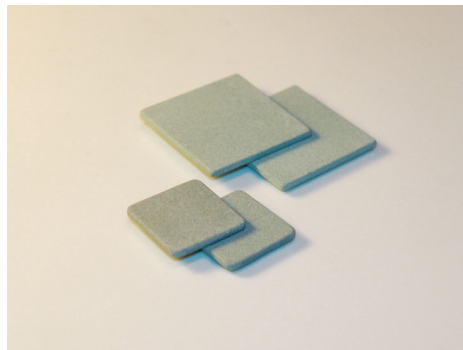
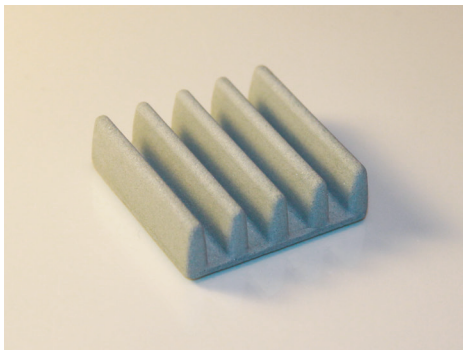
Sizes (mm)

XL-25 30 x 30 x t2.0mm +Li98C
28 x 28 x t0.15mm (With pull tab 5.0mm)

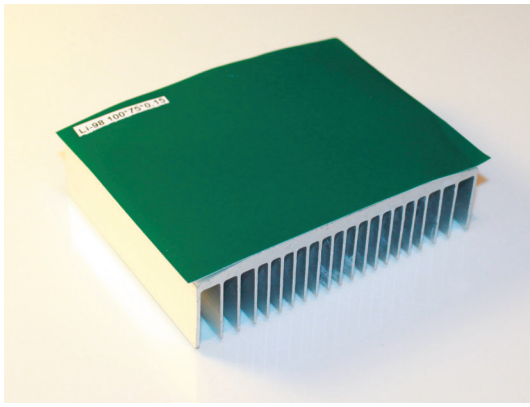
XL-25 20x20xt2.0mm +Li98C
18 x 18 x t0.15mm (With pull tab 5.0mm)



Used examples: Heat sources with XL-25



| Property | XL-25 | Unit | Test Method |
|--|---|---------------------|----------------|
| Colour | Grey | - | Visual |
| Thermal Conductivity | 6.79 | W/m.k | - |
| Dielectric Breakdown Voltage | >500 | Voltage | ASTM D149 |
| Specific Gravity | 1.89 | g/cm ³ | CNS 619 |
| Surface Resistance | >10 ⁹ | Ohm | ASTMD 257 |
| Flexural Strength | 47.5 | Kgf/cm ² | CNS 12701 |
| Porosity | 30 | % | CNS 619 |
| Working Temperature | >500 | °C | - |
| Linear Temperature Expansion Coefficient | 4.13 | 10/06/11 | RT-300 °C |
| Main Composition | SiC / Al ₂ O ₃ / SiO ₂ | - | - |
| Hardness | 5~6 | Moh's | DIN EN101-1992 |
| Shelf Life | 12 | Months | - |



Li-98 Features

Good adhesion
 Very good thermal conductivity
 Highly compressible
 Easy to assemble

Applications

Electronic components: IC / CPU / MOS
 LED / M/B / P/S / Heat Sink / LCD-TV / Notebook PC / PC / Telecom Device /
 Wireless Hub etc....
 DDR II Module / DVD Applications / Hand-Set applications etc...

Properties

| Property | Li-98 | | Li-98C | Li98CN | Unit | Test Method |
|---|-----------------|------------|------------|------------|-------------------|-------------|
| Thickness | 0.15 | 0.25 | 0.2 | 0.18 | | ASTM D374 |
| Colour | White | White | White | White | | Visual |
| Reinforcement carrier | Fibreglass mesh | | | | | |
| Density | 1.85 | 1.85 | 1.9 | 1.8 | g/cm ³ | ASTM D792 |
| Tensile strength | 200 | 400 | 200 | 50 | psi | ASTM D412 |
| Glass transition temperature | -30 | -30 | -27 | -30 | °C | |
| Short time use temperature (30sec) | 200 | 200 | 200 | 200 | °C | |
| Continuous working temperature | -30 to 120 | -30 to 120 | -30 to 120 | -30 to 120 | °C | |
| Thermal conductivity | 0.95 | 0.95 | 1.8 | 2 | W/mK | ASTM D5470 |
| Thermal impedance @ <1psi | 1.0 | 1.8 | 0.7 | 0.6 | C in 2/W | ASTM D5470 |
| Thermal impedance @ 50psi | 0.9 | 1.5 | 0.5 | 0.3 | C in 2/W | ASTM D5470 |
| Initial tack | 11 | 10 | 14 | 15 | cm | PSTC-6 |
| Lap shear strength | 61 | 61 | 65 | 55 | N/cm ² | ASTM D1002 |
| Die shear strength @ 25 °C | 120 | 120 | 118 | 100 | N/cm ² | - |
| Die shear strength @ 80 °C | 69 | 69 | 68 | 55 | N/cm ² | - |
| Holding power 1000g @ 25 °C using 1 in ² | >10000 | >10000 | >10000 | >10000 | min | PSTC-7 |
| Holding power 1000g @ 80 °C using 1 in ² | >10000 | >10000 | >10000 | >10000 | min | PSTC-7 |
| 180° peeling strength (aluminium) | 4 | 5 | 4 | 3 | N/cm | ASTM D3330 |
| Dielectric breakdown voltage (Vac) | >2 | >3 | >3 | >5 | kV | ASTM D149 |
| Dielectric breakdown voltage (Vdc) | >3 | >4 | >4 | >6 | kV | ASTM D149 |

