



# TG-CJ-20-20-6-PF Ceramic Heatsink

Version 1.220917

## Ceramic Heatsink

T-Global's range of ceramic heatsinks have been designed from a proprietary blend of engineering ceramics to offer superior thermal management for the most demanding of applications. Compared to aluminium, ceramics confer additional benefits such as electrically isolating, resistant to corrosion, low weight and does not act like an antenna. The addition of a pre-applied thermal tape further reduces the manufacturing complexity when compared to aluminum heatsinks.

## Features

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

## Applications

LED, M/B, P/S, LCD, TV, Notebook, PC, PC Telecom Device, Wireless Hub, Power transistor, Power module, CPU, Chip IC

## Properties

- ✓ REACH Compliant
- ✓ ROHS Compliant

| Property            | Main Component                 |                             | Technical Ceramic    |
|---------------------|--------------------------------|-----------------------------|----------------------|
|                     | Property                       | Unit                        |                      |
| Physical Property   | Density                        | g/cm <sup>3</sup>           | 3.66                 |
|                     | Water Absorption               | %                           | 0.002                |
|                     | Sinter Temperature             | °C                          | 1700                 |
|                     | Acid Resistance                | mg/cm <sup>3</sup>          | ≤0.2                 |
|                     | Alkali                         | mg/cm <sup>3</sup>          | ≤0.2                 |
| Mechanical Property | Mohs Hardness                  | HV                          | 9                    |
|                     | Bend Strength                  | Mpa                         | ≥ 610                |
|                     | Compression Intensity          | Mpa                         | ≥ 620                |
| Thermal Property    | Maximum Working Temperature    | °C                          | 1400                 |
|                     | Thermal Expansion Coefficient  | (1x10 <sup>-6</sup> ) mm/°C | 7.8-8.3              |
|                     | Thermal Shock Resistance       | T (°C)                      | 200                  |
|                     | Thermal Conductivity           | W/m.k.                      | 40-51                |
| Electrical Property | Resisting Rate of Volume       | Ω °C                        | 1016                 |
|                     | DC Breakdown Strength          | KV/mm                       | 15.2-16.7            |
|                     | Insulation Breakdown Intensity | KV/mm                       | 18                   |
|                     | Dielectric Constant (1MHz)     | (E)                         | 10                   |
|                     | Dielectric Dissipation         | (tg o)                      | 0.4*10 <sup>-3</sup> |

## Part Number Information

### TG-CJ-20-20-6-PF

| Product          | Length | Width | Depth | Adhesive |
|------------------|--------|-------|-------|----------|
| TG-CJ-20-20-6-PF | 20     | 20    | 6     | -        |

\* All measurements in mm

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