

Application Insight

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Fibre Optic Lighting Potting Opti-tec 5053-F-B

Application

Unitising of common end of fibre optic lighting harnesses.

Substrates bonded	Stainless steel, brass, glass optical fibres
Process	Potting and polishing
Pre-treatment	None
Curing conditions	 120°C for 5 minutes
Resistances required	 High temperature resistance up to 200°C
Key selection criteria	 Glass-like, Shore D 85 hardness which can be machined and polished
Customer benefits	 High surface energy, low viscosity material wicks between optical fibres for complete coverage Long pot life allows component adjustments during assembly Cures to full strength in minutes, boosting productivity



Product description

Opti-tec 5053-F-B is a two-component, low viscosity, heat curing epoxy designed for high-temperature applications.

Features and benefits:

- Strong adhesion to most materials used in fibre optics and optics, including metals, ceramics, glass and plastics
- High glass transition temperature results in excellent high temperature performance and creep resistance
- Specially formulated to have very low skin sensitivity
- Resists moisture, vapours and most chemicals
- Colour change upon cure, going from clear to deep translucent red
- Long pot life and good handling characteristics

Suitable in applications involving:

- Endoscope manufacture and repair
- Optoelectronics
- Sub-sea electronics potting



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Let's start by talking about your application



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