

# DATA SHEET

## Black Ice 712

#### **Electrically and Thermally Conductive Grease**

#### DESCRIPTIONS

Silver Ice 712 is low cost, Silicone based re-workable, Carbon-Graphite filled thermally and electrically conductive grease. Offers surface to surface, metal to metal and sliding contact requiring continuous electrical and thermal path. Specially designed to offer wet film to achieve full interface contact at low pressure.

**Silver Ice 712** used in high power electrical applications to improve the operational efficiency in switches, circuit breaker, knife blade switches and other sliding metal contact. Excellent choice for communication equipment, cell phone connections, antenna, HAM radio, lighting and motion sensor.

#### **KEY FUTURES AND BENEFITS**

- Thermal Conductivity (2.2 W/m-K)
- Low Resistivity ( <25 ohm-cm)
- Re-workable <u>Wet Film</u>, Non curable
- Excellent wetting property
- Thin Bond line Thickness <25 micron

### **APPLICATIONS**

- Electrical contacts, EMI/RFI sealing and shieling
- Electro Static Discharge (ESD) anti-static systems. RF Modules
- Power Transistors, Diodes, Power Resistors
- High power cpu/heat sink/liquid cooling

AVAILABILITY

Syringes (3cc, 10cc, 30cc). Jars (8 oz & 1 Kg). Cartridges (6 oz. Semco & 300cc). 1 gallon & 5 gallon pail

Typical Property	Test Method	Results
Туре		Silicone Free
Special Future		Electrically and Thermally Conductive Wet type film, Excellent wetting, spreadability
Color	Visual	Black
Viscosity 5 rpm @ 25°C, PaS	Helipath	250
Specific Gravity	ASTM D792	1.3
Operating Temperature Range.°C		-55°C to 200°C
Shelf Life @25C		5 years
THERMAL		
Thermal Conductivity (W/m-K)	Laser Flash	2.2
Thermal Resistance °C-in²/W	ASTM D5470	0.05
ELECTRICAL		
Breakdown Voltage (KV/mm)	ASTM D149	N/A
Dissipation Factor (1KHz)	ASTM D150	N/A
Volume Resistivity (Ohm-cm)	ASTM D257	<25

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