



THERMAL COMPOUNDS, ADHESIVES AND INTERFACE MATERIALS

126 SERIES



The **126 Series** is a nontoxic, synthetic, ester-based (nonsilicone) Thermal Joint Compound with metal oxide fillers designed to enhance thermal performance characteristics of plastic and metal package devices exceeding that of silicone-based compounds. Solved are problems associated with contamination of wave solder baths and migration of silicone-based products. Shelf life: 5 years.

126 SERIES THERMAL JOINT COMPOUND	
Characteristics	Description
Appearance	Smooth, white homogeneous paste
Solids Content, wt %	65% min
Thermal Conductivity at 36°C	.69 W / m °K, 4.8 (Btu)(in.)/(hr) (ft²) (°F)
Interface Thermal Resistance	0.043°C/W TO-3 at 0.0008 thick film
Bleed, 24 hrs at 200°C, wt%	0.09% max
Evaporation, 24 hrs at 200°C, wt%	0.6 max
Volume Resistivity	2.3 x 10 ¹² ohms-cm
Dielectric Strength	200 volts/mil
Specific Gravity @ 60°F	2.93 (gm/cc)
Penetration	280 to 320
Operating Range	-40°C to 200°C

126 SERIES - ORDER GUIDE	
Series - P/N	Container Size
126-2	2 oz (0.6 kg) jar
126-4	4 oz (0.11 kg) tube
126-4S	4 oz (0.11 kg) syringe
126-5LB	5 lb (2.27 kg) can

DeltaBond™ 152



DeltaBond™ 152 adhesive is ideal for general cementing; thermally bonding semiconductors and components to chassis or heat sinks, while electrically isolating one from the other; fabricating heat sinks or thermal links; and for all permanent bonding of assemblies which require high thermally conductive interfaces. It produces a rigid, high strength bond to most materials when cured. **DeltaBond™ 152** is available in bi-packs, kits, and quarts. Order one hottle of hardener A-4 or B-4 per one quart of **DeltaBond™ 152** separately. Shelf life: 152KA 3 year, all others 3 years.

DELTA BOND™ 152		
Characteristics	Hardener Type	
	A4	B4
Typical Properties Fully Cured		
Thermal conductivity - W/(m) (°K)	0.836	0.908
(Btu) (in.)/(hr) (ft²) (°F)	5.8	6.3
Thermal resistivity - (°C) (in./watt)	47	42
Bond shear strength 77°F	2,900	2,300
1 in. overlap - psi 125°F	2,200	2,000
etched aluminum to etched aluminum 212°F	400	800
Heat distortion point - °F	130	225
Minimum dielectric strength, v/mil, 0.125 in. sample	400	400
Max operation temp - °C	65	150
	Continuous	Intermittent
	100	190

DELTA BOND™ 152		
Mixing Proportions and Working Properties		
Characteristics	A4	B4
Parts of hardener per 100 parts of resin by weight	7.5	3.5
*Working Time - at 77°F	45 min	30 min
†Initial cure time 77°F	8 hrs	6 hrs
	150°F	45 min
	250°F	20 min
‡Post-cure time at a temp in °F	4 hrs @200°F	4 hrs @ 200°F
‡Alternate room temp. aging time at 77°F	4 days	4 days
Working consistency (77°F)	viscous liquid	paste
Working viscosity (77°F) cps	25,000	—

Model Number	DELTA BOND™ 152		
	Ordering Guide - Resin and Hardener		
	Resin		Hardener
	Part No.	Container	Part Number
DeltaBond™ 152	152-1A	Bi-Pack (1 oz)	Included in PIN 152-1 A ("A-4") Type Included in P/N 152-1 B ("B-4") Type Included in P/N 152-KA A-4 (0.316 lb), B-4 (0.14 lb), (order 1 only)
	152-1B	Bi-Pack (1 oz)	
	152-KA	Kit (7 oz Resin, 0.5 oz Hardener)	
	152-Q	1 quart (4 lbs)	

All hardener part numbers A-4, B-4

NOTES:

* Since the hardener/resin reaction is exothermic, it is important that batch size be matched to hardener speed. Working times given are for approximate batch sizes: A—200 gms, B—200 gms. Larger batch sizes will greatly reduce working time.

** For optimum electrical properties, dry parts for 15 minutes at 150°F (65°C) or 30 minutes at 75°F (24°C) to slowly evaporate the thinner and then final cure for 4 hours at 275°F (135°C).

† After initial cure, material may be handled, removed from fixture, etc., but has not yet achieved full properties and should be room temperature aged or post-cured as shown to achieve full physical and electrical properties.

‡ After initial cure, material may be brought to full physical and electrical properties during post-cure or may be room temperature aged for charted length of time to achieve same full properties.

The information contained herein is based on data believed to be reliable but we do not assume responsibility for accuracy. All such information is used at the customer's own risk, conditions of use being beyond our control.