

Order code	Manufacturer code	Description			
38-1010	n/a	n/a			
38-1012	n/a	n/a			
38-1014	n/a	n/a			

	Page 1 of 2
The enclosed information is believed to be correct, Information may change ±without noticeque to	Revision A
product improvement. Users should ensure that the product is suitable for their use. E. & O. E.	20/02/2007

Technical: 01206 835555 Tech@rapidelec.co.uk Fax: 01206 751188 www.rapidonline.com

Bond-Ply[®] 100

Thermally Conductive, Fiberglass Reinforced Pressure Sensitive Adhesive Tape

Features and Benefits

- Thermal impedance: 0.86°C-in²/W (@100 psi)
- High bond strength to a variety of surfaces
- Double-sided, pressure sensitive adhesive tape
- High performance, thermally conductive acrylic adhesive
- Can be used instead of heat-cure adhesive, screw mounting or clip mounting



Typical Applications Include:

- Mount heat sink onto BGA graphic processor or drive processor
- Mount heat spreader onto power converter PCB or onto motor control PCB

Configurations Available:

• Sheet form, roll form, and die-cut parts

Shelf Life: The double-sided, pressure sensitive adhesive used in Bond-Ply products requires the use of dual liners to protect the surfaces from contaminants. Bergquist recommends a 6-month shelf life at a maximum continuous storage temperature of 35°C, or 3-month shelf life at a maximum continuous storage temperature of 45°C, for maintenance of controlled adhesion to the liner. The shelf life of the Bond-Ply material, without consideration of liner adhesion (which is often not critical for manual assembly processing), is recommended at 12 months from date of manufacture at a maximum continuous storage temperature of 60°C.

TYPICAL PF	ROPERT	IES OF	S OF BOND-PLY 100							
PROPERTY	IMPERIAL VALUE		METRIC VALUE		TEST METHOD					
Color	White		White		Visual					
Reinforcement Carrier	Fiberglass		Fiberglass							
Thickness (inch) / (mm)	0.005, 0.008, 0.011		0.127, 0.203, 0.279		ASTM D374					
Temp. Resistance, 30 sec. (°F) / (°C)	392		200							
Elongation (%45° to Warp & Fill)	70		70		ASTM D412					
Tensile Strength (psi) / (MPa)	900		6		ASTM D412					
CTE (ppm)	325		325		ASTM D3386					
Glass Transition (°F) / (°C)	-22		-30		ASTM 1356					
Continuous Use Temp (°F) / (°C)	-22 to 248		-30 to 120							
ADHESION										
Lap Shear @ RT (psi) / (MPa)	100		0.7		ASTM D1002					
Lap Shear after 5 hr @ 100°C	200		1.4		ASTM D1002					
Lap Shear after 2 min @ 200°C	200		1.4		ASTM D1002					
Static Dead Weight Shear (°F) / (°C)		302		150		PSTC#7				
ELECTRICAL		VALUE		TEST METHOD						
Dielectric Breakdown Voltage - 0.005" (Vac)			3000		ASTM D149					
Dielectric Breakdown Voltage - 0.008" (Vac)			6000		ASTM D149					
Dielectric Breakdown Voltage - 0.011		8500		ASTM D149						
Flame Rating		V-O		U.L.94						
THERMAL										
Thermal Conductivity (W/m-K)		0.8		ASTM D5470						
THERMAL PERFORMANCE vs PRESSURE										
Pres	sure (psi)	10	25	50	100	200				
TO-220 Thermal Performance (°C/W	4.39	4.02	3.48	3.15	3.05					
TO-220 Thermal Performance (°C/V	5.11	4.69	4.53	4.45	4.38					
TO-220 Thermal Performance (°C/V	6.26	5.92	5.73	5.63	5.53					
Thermal Impedance (°C-in²/W) (0.78	0.61	0.58	0.55	0.54					
Thermal Impedance (°C-in²/W) (1.28	0.94	0.90	0.86	0.84					
Thermal Impedance (°C-in²/W) (2.47	1.22	1.19	1.14	1.11					
I) The ASTM D5470 (Bergquist modified) test fixture was used. The recorded value includes interfacial thermal resistance. These										

The ASTM D5470 (Bergquist modified) test fixture was used. The recorded value includes interfacial thermal resistance. These
values are provided for reference only. Actual application performance is directly related to the surface roughness, flatness and
pressure applied.

Building a Part Number



Standard Options



Note: To build a part number, visit our website at www.bergquistcompany.com.

Bond-Ply®: U.S. Patent 5,090,484 and others.

The Bergquist Company -North American Headquarters 18930 West 78th Street Chanhassen, MIN 55317 Phone: 800-347-4572 Fax: 952-835-0430

The Bergquist Company - Europe Bramenberg 9a, 3755 BT Eemnes Netherlands Phone: 31-35-5380684 Fax: 31-35-5380295

The Bergquist Company - China Rm. 7C, Aihe Mansion No. 629 Ling Ling Road Shanghai, China 200030 Ph: 86-21-6464-2206 Fax: 86-21-6464-2209

www.bergquistcompany.com

All statements, technical information and recommendations herein are based on tests we believe to be reliable, and THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES, EXPRESSED OR IMPLED, INCLUDING THE IMPLIED WARRANTIES OF MARKETABILITY AND FITNESS FOR PURPOSE. Sellers' and manufacturers' only obligation shall be to replace such quantity of the product proved to be defective. Before using user shall determine the suitability of the product for its intended use, and the user assumes all risks and liability whatsoever in connection therewith. NEITHER SELLER NOR MANUFACTURER SHALL BE LIABLE EITHER INTORT OR IN CONITRACT FOR ANY LOSS OR DAMAGE, DIRECT, INCIDENTAL, OR CONSEQUENTIAL, INCLUDING LOSS OF PROFITS OR REVENUE ARISING OUT OF THE USE OR THE INABILITY TO USE A PRODUCT. No statement, purchase order or recommendations by seller or purchaser not contained herein shall have any force or effect unless in an agreement signed by the officers of the seller and manufacturer.