

Electrically Conductive Adhesive Comparison Chart

	8330	8330S	8331	8331S
UNCURED PROPERTIES				
Mix ratio by volume	1:1	1:1	1:1	1:1
Mixed density	3.3 g/mL	3.4 g/mL	2.6 g/mL	2.5 g/mL
Viscosity	Thixotropic	Thixotropic	Thixotropic	Thixotropic
CURED PROPERTIES				
Application Parameters				
Working life	10 min	4 h	10 min	4 h
Service cure	5 h	N/A	5 h	N/A
Full cure @22 °C (72 °F)	24 h	Heat cure only	24 h	Heat cure only
Full cure @65 °C (149 °F)	20 min	2 h	15 min	2 h
Full cure @80 °C (176 °F)	N/A	1 h	N/A	1 h
Full cure @100 °C (212 °F)	N/A	30 min	N/A	30 min
Electrical Properties				
Volume resistivity	0.001 Ω·cm	0.0007 Ω·cm	0.007 Ω·cm	0.006 Ω·cm
Thermal Properties				
Constant service temperature	-55 to 150 °C [-67 to 302 °F]	-40 to 150 °C [-40 to 302 °F]	-55 to 150 °C [-67 to 302 °F]	-40 to 150 °C [-40 to 302 °F]
Glass transition temperature (T _g)	53 °C [127 °F]	34 °C [93 °F]	50 °C [122 °F]	34 °C [93 °F]
CTE prior T _g	89 ppm/°C [192 ppm/°F]	97 ppm/°C [206 ppm/°F]	54 ppm/°C [130 ppm/°F]	78 ppm/°C [172 ppm/°F]
CTE after T _g	224 ppm/°C [435 ppm/°F]	208 ppm/°C [406 ppm/°F]	169 ppm/°C [336 ppm/°F]	158 ppm/°C [316 ppm/°F]
Thermal conductivity @25 °C (75 °F)	1.8 W/(m·K)	2.4 W/(m·K)	1.4 W/(m·K)	1.3 W/(m·K)
Thermal diffusivity @25 °C (75 °F)	1.0 mm ² /s	1.2 mm ² /s	0.9 mm ² /s	0.7 mm ² /s
Specific heat capacity @25 °C (75 °F)	0.6 J/(g·K)	0.6 J/(g·K)	0.7 J/(g·K)	0.8 J/(g·K)
Physical Properties				
Color	Silver grey	Silver grey	Silver grey	Silver grey
Hardness	83D	73D	70D	73D
Tensile strength	13 N/mm ² [1 900 lb/in ²]	9.0 N/mm ² [1 300 lb/in ²]	13 N/mm ² [1 900 lb/in ²]	14 N/mm ² [2 000 lb/in ²]
Compressive strength	36 N/mm ² [5 200 lb/in ²]	36 N/mm ² [5 200 lb/in ²]	39 N/mm ² [5 700 lb/in ²]	65 N/mm ² [9 400 lb/in ²]
Lap shear (stainless steel)	6.5 N/mm ² [940 lb/in ²]	1.3 N/mm ² [190 lb/in ²]	N/A	1.1 N/mm ² [160 lb/in ²]
Lap shear (aluminum)	5.4 N/mm ² [780 lb/in ²]	2.6 N/mm ² [380 lb/in ²]	8.0 N/mm ² [1 160 lb/in ²]	4.8 N/mm ² [690 lb/in ²]

Refer to TDS for more information.
N/A=Not Available