

複合材料散熱器 GDC Series

Composite Materials Heat Sink



- 非金屬、重量輕 (Non-metallic, lightweight)
- 高輻射係數、高導熱能力 (High emissivity, high thermal conductivity)
- 易於量產及開發複雜散熱 結構 (Easy to mass-produce and develop complex heat dissipation structures)
- 抗EMI (EMI resistance)

Properties 特性	Test Method	GDC-B	GDC-C	GDC-X
Thermal Conductivity 熱傳導係數 (室溫)	ISO 22007-2.2 Hot Disk	1.0 W/m·k	3.0 W/m·k	7.0 W/m·k
Emissivity 熱輻射係數 (發射率)	ASTM E408	>0.5	>0.7	>0.7
Heat Deflection Temperature 熱變形溫度	ASTM D648	220 °C	220 °C	220 °C
Tensile Strength 拉伸強度	ASTM D638	40±5 MPa	38±5 MPa	35±5 MPa
Tensile Modulus 拉伸模數	ASTM D638	12±2 GPa	11±2 GPa	9±2 GPa
Elongation at break 斷裂伸長率	ASTM D638	1.05±0.2 %	0.95±0.2 %	0.9±0.2 %
Bending Strength 彎曲強度	ASTM D790	65±7 MPa	62±7 MPa	58±7 MPa
Bending Modulus 彎曲模數	ASTM D790	13±2 GPa	11±2 GPa	9±2 GPa
Impact Strength 衝擊強度	ASTM D256	30±5 KJ/m2	28±5 KJ/m2	25±5 KJ/m2
Density 密度	ASTM D792	2.05±0.1 g/cm3	2.0±0.1 g/cm3	1.9±0.1 g/cm3
Water Absorption 吸水率 (24hr)	ASTM D570	<1.0 %	<1.0 %	<1.0 %
Flame Rating 耐燃等級	UL94	V0	V0	V0

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Properties 特性	Test Method	GDC-D	GDC-Y
Thermal Conductivity 熱傳導係數 (室溫)	ISO 22007-2.2 Hot Disk	9.0 W/m·k	13.0 W/m·k
Emissivity 熱輻射係數 (發射率)	ASTM E408	>0.7	>0.7
Heat Deflection Temperature 熱變形溫度	ASTM D648	220 °C	220 °C
Tensile Strength 拉伸強度	ASTM D638	33±5 MPa	30±5 MPa
Tensile Modulus 拉伸模數	ASTM D638	8±2 GPa	7±2 GPa
Elongation at break 斷裂伸長率	ASTM D638	0.8±0.2 %	0.7±0.2 %
Bending Strength 彎曲強度	ASTM D790	53±7 MPa	50±7 MPa
Bending Modulus 彎曲模數	ASTM D790	8±2 GPa	8±2 GPa
Impact Strength 衝擊強度	ASTM D256	22±5 KJ/m2	20±5 KJ/m2
Density 密度	ASTM D792	1.85±0.1 g/cm3	1.80±0.1 g/cm3
Water Absorption 吸水率 (24hr)	ASTM D570	<1.0 %	<1.0 %
Flame Rating 耐燃等級	UL94	V0	V0