



技術資料表
Technical Data Sheet

KGRFTYPE

剛性強化、耐熱，增韌級

Rigid strengthening, heat resistance, toughening grade

樹脂 Resin PBT Polybutylene terephthalate

規格 Grade KGR56-A33D

樹脂來源 Resin source 上禾伸企業

描述 Description

■增韌提高耐衝擊性，耐低溫優良。

Toughening improves impact resistance and excellent low temperature resistance.

■30%玻纖剛性強化，耐熱提升。

30% glass fiber rigid reinforcement, heat resistance improved.

■優異的電氣性能，耐熱老化性佳。

Excellent electrical properties, good heat aging resistance.

■耐油及耐化學性佳。

Good oil and chemical resistance.

■尺寸安定性、低吸濕性。

Dimensional stability, low hygroscopicity.

■結晶速度快，成型性優異，流動性良好可製薄壁成品。

Fast crystallization speed, excellent formability, and good fluidity to produce thin-walled products.

■耐水解性高，耐候性佳。

High hydrolysis resistance and good weather resistance.

適用於新能源產業、電子連接器 (connector)、繼電器、開關、配電箱、光纖電纜護套、照明零組件及低溫需求之相關應用。

Suitable for new energy industry, electronic connectors, relays, switches, distribution boxes, fiber optic cable jackets, lighting components and related applications with low temperature requirements.

成型模式 Forming mode 射出成型 Injection Molding



特性 Properties

項目 Project	單位 Unit	測試標準 Testing standards	標準數值 Typical Value
比重 Specific Gravity	g/cm ³	ASTM D792	1.49
收縮率-平行∥ Mold Shrinkage MD	%	3 mm t	0.1~0.3
收縮率-垂直⊥ Mold Shrinkage TD			0.7~11
耐燃性 Flammability		UL-94	HB
顏色 Color			natural

機械特性 Mechanical properties

項目 Project	單位 Unit	測試標準 Testing standards	標準數值 Typical Value
伸張降伏強度 Tensile Strength at Yield			1050
伸張斷裂強度 Tensile Strength at Break	kg/ cm ²	ASTM D638	930
拉伸彈性係數 Tensile Modulus			62000
斷裂伸張率 Tensile Elongation at Break	%		5.5
彎曲強度 Flexural Strength	kg/ cm ²	ASTM D790	1580
彎曲模數 Flexural Modulus			65500
衝擊強度(缺口式)IZOD Impact (notched)	23°C kg-cm/cm	ASTM D256	13
硬度 Rockwell/Shore Hardness	D	ASTM D2240	71

熱力特性 Heat properties

熱變型溫度 18.54kg/ cm ² H D T	°C	ASTM D648	170
熱變型溫度 4.6kg/ cm ² H D T			195

成型條件 Molding conditions

烘乾溫度 Drying temp. °C	120	烘乾時間 Drying time H	4
進料區溫度 Feed zone temp. °C	230~245	壓縮區溫度 Compression zone temp. °C	235~250
計量區溫度 Metering zone temp. °C	245~260	噴嘴溫度 Nozzle temp. °C	245~265
模具溫度 Mold temp. °C	70~100	射出壓力 Injection pressure Kg/ cm ²	**

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