

POKETONE® M33AG6R-BK0

General

Feature	Glass-reinforced high-flow injection molding grade
Special Characteristics	Low GWP, Low NVH, High impact
Processing method	Injection molding
Certification	-
Colors available	Black
UL File number	-
Form	Pellet
Applications	Automotive Radiator End Tank

Physical Properties

	ASTM	Value	ISO	Value
Density	D792	1.46 g/cm ³	1183	1.46 g/cm ³
Shore D hardness	D2240		868	
Hardness Rockwell	D785		2039	
Water absorption equilibrium at RH 50%	D570		62	
Water absorption at Saturation	D570		62	
Melt flow index 240°C/2.16kg	D1238	18 g/10 min	1133	
	D955		294-4	
Mold Shrinkage	MD, 3 mm			
	TD, 3 mm			
	MD, 2 mm			
	TD, 2 mm			

Mechanical Properties

	ASTM	Value	ISO	Value
Tensile strength at yield	D638		527-1	149 MPa
Tensile modulus	D638		527-1	8,700 MPa
Tensile elongation at yield	D638		527-1	
Tensile elongation at break	D638		527-1	3.0 %
Flexural strength	D790		178	204 MPa
Flexural modulus	D790		178	6,900 MPa
Unnotched Izod impact strength	D256		180/1U	
Notched Izod impact strength	D256		180/1A	
Unnotched Charpy impact strength	D6110		179/1eU	

Notched Charpy impact strength	D6110	179/1eA	11.5 kJ/m ²
Falling dart impact strength		6603-2	

Thermal Properties

	ASTM	Value	ISO	Value
Melting temperature	D3418	222 °C	11357	222 °C
Coefficient of linear thermal expansion, 25 ~ 55°C	E831 TD MD		11359	
Vicat softening point	D1525 5 kg		306/B50 50 N	
Heat deflection temperature	D648 66 psi 264 psi		75 0.45 MPa 1.8 MPa	

Electrical Properties

	Test Method & Condition	Value
Dielectric Strength (DS)	ASTM D149 3 mm 2 mm	
Volume Resistivity (VR)	ASTM D257	
Surface Resistivity (SR)	ASTM D257	
Dielectric constant at 60Hz	ASTM D150	
Dissipation factor at 60Hz	ASTM D150	

Injection Molding Processing Conditions

	Value
Drying temperature	80 °C
Drying time	3 ~ 4 hr
Suggested max moisture	0.20 %
Nozzle temperature	240 °C
Zone 1 temperature	230 °C
Zone 2 temperature	220 °C

	Zone 3 temperature	215 °C
	Zone 4 temperature	210 °C
	Processing temperature	225 ~ 240 °C
	Mold temperature	80 ~ 120 °C
Pressure	Back pressure	0.294 ~ 0.686 MPa
Speed	Screw Speed	50 ~ 100 rpm

* The data listed here is not for specification warranty, but typical value.

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