



Description:

The PHD series is a flexible, polyolefin, thin wall tubing which offers the advantages of an integral adhesive lining. Provides excellent environmental protection for electronic components.

Typical Properties

Physical

Tensile Strength	: 2,100 PSI
Ultimate Elongation	: 450%
Longitudinal Change	: +1%, -5%
Secant Modulus (2%)	: 17,000 PSI
*Heat Aging (168 hrs @ 175°C)	Elongation 175%
*Heat Shock (4 hrs @ 250°C)	No dripping, cracking, or flowing
* Low Temp Flexibility (4 hrs @ -55°C)	No cracking
**Flexibility	: 3
Shrinkage	: 2:1
Shrink Temp	: 121°C (250°F)
Operating Temp	: -55°C to 100°C (-67°F to 230°F)

Electrical

Dielectric Strength	: 800V/Mil
Volume Resistivity	: 10 ¹⁴ Ω-cm

Chemical

Corrosion Effect	: Non-Corrosive
Water Absorption	: 0.3%
Fungus Resistance	: Non-nutrient
Fluid Resistance	: Excellent
Applicable Specifications	: MIL-DTL-23053/4 Class 2

Adhesive

Peel Strength, pli	
Polyethylene	: 30
PVC	: 10
Lead	: 15
Aluminium	: 40

Corrosive Effect (Copper Mirror) Non-corrosive

* Outer wall only.

** Flexibility: The materials are rated on a scale of typical product data and should not be used for specifications purposes. Unless otherwise noted, all tests are performed at room temperature.

Part Number Table

Description	Dimensions				Standard Packages (Colour: Black)					
	Size (Inch)	Expanded I.D. (Min.) (Inch)	Recovered I.D. (Max.) (Inch)	Recovered Nominal Wall Thickness (Inch)	4 Foot Lengths (+1, -0)			6 Inch Lengths (± 0.125)		
					Part Number	Qty	Total Footage (Feet)	Part Number	Qty	Total Footage (Feet)
PHD Series-Flame Retardant, Adhesive-Lined Tubing	1/8	0.125	0.063	0.27	PHD-008-4025-BLK	25	100	PHD-008-6028-BLK	28	14
	3/16	0.187	0.093		PHD-012-4025-BLK			PHD-012-6025-BLK	24	12
	1/4	0.250	0.125	0.3	PHD-016-4025-BLK			PHD-016-6020-BLK	20	10
	3/8	0.375	0.187	0.31	PHD-024-4025-BLK			PHD-024-6016-BLK	16	8
	1/2	0.5	0.250	0.32	PHD-032-4005-BLK	5	20	PHD-032-6014-BLK	14	7
	3/4	0.75	0.375	0.37	PHD-048-4005-BLK			PHD-048-6012-BLK	12	6
	1	1	0.5	0.46	PHD-064-4005-BLK			PHD-064-6008-BLK	8	4
	1 1/2	1.5	0.75	0.49	PHD-096-4005-BLK			PHD-096-6005-BLK	5	2.5
2	2	1	0.6	PHD-128-4002-BLK	2	8	PHD-128-6002-BLK	2	1	

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