PTS2-50-PVDF

PTS2-50, HELIAX® Superflexible High Power, High Temperature 50ohm plenum Rated Coaxial Cable, corrugated copper, 3/8 in, blue PVDF jacket

OBSOLETE

Product Classification

Product Type	Coaxial wireless cable
Product Brand	HELIAX®
Product Series	PTS2-50-P

General Specifications

Flexibility	Superflexible
Jacket Color	Blue
Performance Note	Attenuation values typical, guaranteed within 5%

Dimensions

Diameter Over Dielectric	7.112 mm | 0.28 in
Diameter Over Jacket	10.668 mm | 0.42 in
Inner Conductor OD	2.794 mm | 0.11 in
Outer Conductor OD	9.652 mm | 0.38 in
Nominal Size	3/8 in

Electrical Specifications

3rd Order IMD	-107 dBm
3rd Order IMD Test Method	Two +43 dBm carriers
Cable Impedance	50 ohm ±1 ohm
Capacitance	79.7 pF/m | 24.293 pF/ft
dc Resistance, Inner Conductor	4.232 ohms/km | 1.29 ohms/kft

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dc Resistance, Outer Conductor	4.987 ohms/km | 1.52 ohms/kft
dc Test Voltage	2300 V
Inductance	0.2 µH/m | 0.061 µH/ft
Insulation Resistance	100000 MOhms-km
Jacket Spark Test Voltage (rms)	4000 V
Operating Frequency Band	1 – 13400 MHz
Peak Power	13.2 kW
Velocity	83 %

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
50.0	3.12	0.95
150.0	5.58	1.7
220.0	6.86	2.09
450.0	10.2	3.1
900.0	15.2	4.63
1500.0	20.2	6.15
2000.0	23.8	7.25
2500.0	27.1	8.25

Material Specifications

Dielectric Material	Foam FEP
Jacket Material	PVDF
Inner Conductor Material	Copper-clad aluminum wire
Outer Conductor Material	Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends	25.4 mm | 1 in
Minimum Bend Radius, single Bend	25.4 mm | 1 in
Number of Bends, minimum	20
Number of Bends, typical	50
Tensile Strength	95 kg | 209.439 lb
Bending Moment	2.3 N-m | 20.357 in lb
Flat Plate Crush Strength	1.8 kg/mm | 100.795 lb/in

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Environmental Specifications

Operating Temperature	-55 °C to +125 °C (-67 °F to +257 °F)
Storage Temperature	-55 °C to +125 °C (-67 °F to +257 °F)
Attenuation, Ambient Temperature	68 °F | 20 °C
Average Power, Ambient Temperature	104 °F | 40 °C
Average Power, Inner Conductor Temperature	392 °F | 200 °C
Fire Retardancy Test Method	NFPA 262/CMP | UL 910/CATVP

Packaging and Weights

Cable weight	0.13 kg/m | 0.087 lb/ft