



EXACTEST HARDENED Precision Microwave Test Cables, 110GHz

Features

- ET110H Series
- VSWR 1.50:1 Max up to 110GHz
- 76% Phase Velocity
- Triple Shielded with Spring Armor
- Shielding Effectivity >90dB
- Braided PTFE Fiber, Purple and Black
- Connector 1.00mm



ELECTRICAL SPECIFICATION (25° C, sea level)

Description	Min	Typ	Max	Units/Note
Impedance		50Ω		Ohm
Frequency	DC		110	GHz
VSWR, 40GHz			1.25:1	@40GHz, 1.00mm Connectors
VSWR, 50GHz			1.30:1	@50GHz, 1.00mm Connectors
VSWR, 67GHz			1.35:1	@67GHz, 1.00mm Connectors
VSWR, 110GHz			1.50:1	@110GHz, 1.00mm Connectors
Velocity of Propagation		76		%
Dielectric Withstand		300		Volts
RF Shielding	90			dB
Capacitance		88		pF/m
Temperature	-55		125	° C
Amplitude Stability			±0.25	dB @ 110GHz
Bending Phase Stability			±9.0	° @ 110GHz

Performance by Frequency (Cable Only)

Frequency (MHz)	Max Insertion Loss(25° C) dB/100ft	Average Power(25° C @ Sea Level) Watts
1000	34.66	82
6000	86.23	33
10000	112.16	25
12000	123.26	22
18000	152.19	19
26500	186.39	15
40000	231.77	12
50000	261.09	11
67000	305.63	9
110000	400.60	7

Contact us:
sales@echelon-mw.com
www.echelon-mw.com
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Construction			
Item	Material	Item	Material
1	Center conductor, silver plated copper wire	6	Sheath, FEP
2	Dielectric, LDPTFE	7	Internal Spring Armor
3	Internal shield, silver plated copper ribbon	8	Reinforced Braid, Tinned Copper Wire
4	Middle layer, LDPTFE	9	Anti-torsion protective layer, PTFE winding
5	Outer shield, woven silver plated copper thread	10	Outer jacket, Braided PTFE Fiber, Purple and Black

MECHANICAL SPECIFICATION, CONNECTORS		
Description	Connector 1	Connector 2
Type	1.00mm	1.00mm
Interface Spec	MIL-STD-348	MIL-STD-348
Mating Cycles	5000	5000
Hex Wrench Size	15/64 in	15/64 in
Mating Torque	4-8in-lbs/0.45-0.92nm	4-8in-lbs/0.45-0.92nm
Material	Stainless Steel	Stainless Steel
Pin	Gold Plated BeCu	Gold Plated BeCu
Dielectric Type	PTFE	PTFE

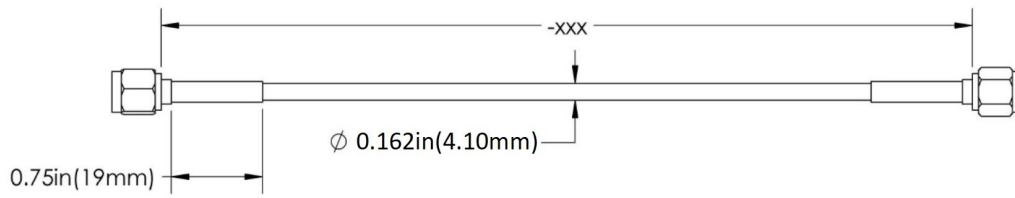
MECHANICAL SPECIFICATION, CABLE	
Description	Specification
Cable Type	ET110H
Diameter	0.162in. (4.1mm)
Weight	0.60kg/m
Armor Crush Resistance	180N/25mm
Minimum Bend Radius, Static	0.866in. (22mm)
Minimum Bend Radius, Dynamic	1.77in. (45mm)
Length	Customer Specified

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Ordering Information



Connector Options:
1.00mm

Part Number Configurator			
Series	Connector 1	Connector 2	Length (in)
EM-ET110H	XXXX	XXXX	-XXX

Connector 1		Connector 2	
1.00mm Male	100M	1.00mm Male	100M
1.00mm Female	100F	1.00mm Female	100F

** - If Connector 1 equals Connector 2, leave Connector 2 blank

Example:

EM-ET110H100M-048, 48 inch cable with 1.00mm male connectors both ends.

EM-ET110H100M100F-024, 24 inch cable with 1.00mm male and 1.00mm Female connectors.

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