



EXACTEST HARDENED Precision Microwave Test Cables, 40GHz

Features

- VSWR 1.30:1 Max up to 40GHz
- 83% Phase Velocity
- Double Shielded with Spring Armor
- Shielding Effectivity >90dB
- Braided PTFE Fiber, Purple and Black
- ET40H Series
- Connector options 2.40mm / 2.92mm



ELECTRICAL SPECIFICATION (25° C, sea level)

Description	Min	Typ	Max	Units/Note
Impedance		50Ω		Ohm
Frequency	DC		40	GHz
VSWR, 18GHz			1.20:1	@18GHz, 2.40mm/2.92mm Connectors
VSWR, 26.5GHz			1.25:1	@26.5GHz, 2.40mm/2.92mm Connectors
VSWR, 40GHz			1.30:1	@40GHz, 2.40mm/2.92mm Connectors
Velocity of Propagation		83		%
Dielectric Withstand		1000		Volts
RF Shielding	90			dB
Capacitance		88		pF/m
Temperature	-55		125	° C
Amplitude Stability			±0.04	dB @ 40GHz
Bending Phase Stability			±4.0	° @ 40GHz

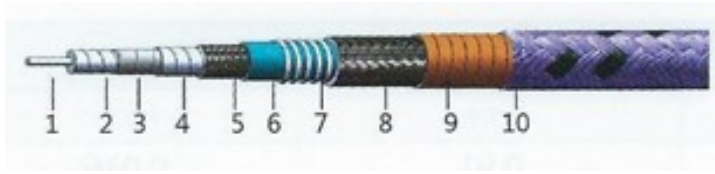
Performance by Frequency

Frequency (MHz)	Insertion Loss(25° C) dB/100ft	Average Power(40° C @ Sea Level) Watts
300	6.22	712
500	8.05	550
1000	11.43	387
3000	20.01	221
6000	28.59	155
10000	37.29	119
12000	41.03	108
18000	50.80	87
26500	62.42	71
40000	77.93	57

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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	2.92mm/2.40mm	2.92mm/2.40mm
Interface Spec	MIL-STD-348	MIL-STD-348
Mating Cycles	5000	5000
Hex Wrench Size	5/16 in	5/16 in
Mating Torque	8-10in-lbs/0.9-1.13nm	8-10in-lbs/0.9-1.13nm
Material	Stainless Steel	Stainless Steel
Pin	Gold Plated BeCu	Gold Plated BeCu
Dielectric Type	PTFE	PTFE

MECHANICAL SPECIFICATION, CABLE	
Description	Specification
Cable Type	ET40H
Diameter	0.264in. (6.7mm)
Weight	0.105kg/m
Armor Compression Resistance	180N/25mm
Minimum Bend Radius, Static	1.32in. (33.5mm)
Minimum Bend Radius, Dynamic	2.64in. (67.0mm)
Length	Customer Specified

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Ordering Information



Part Number Configurator			
Series	Connector 1	Connector 2	Length (in)
EM-ET40H	XXXX	XXXX	-XXX

Connector 1		Connector 2	
2.92mm Male	292M	2.92mm Male	292M
2.92mm Female	292F	2.92mm Female	292F
2.40mm Male	240M	2.40mm Male	240M
2.40mm Female	240F	2.40mm Female	240F

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

Example:

EM-ET40H292M-048, 48 inch cable with 2.92mm male connectors both ends.

EM-ET40H240M292F-024, 24 inch cable with 2.40mm male and 2.92mm Female connectors.

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