Armored Table

Armored Table

		SHF3MR	SHF4MPJ	SHF5PJ	SHF5R	SHF5MR
	Application Code	A	AHD / OD / ULL	AHD / OD	A	A / ULL
Construction	Center conductor	Solid SPC	Solid SPC	Stranded SPC	Stranded SPC	Solid SPC
	Dielectric	PTFE tape	Low density PTFE tape	PTFE tape	PTFE tape	low density PTFE tape
	Inner shield	SPC tape	SPC tape + Aluminum polyimide	SPC tape	SPC tape	SPC tape
	Outer shield	SPC braid	SPC braid	SPC braid	SPC braid	SPC braid
	Inner Jacket	Green PFA	Black PFA	Green FEP	Green FEP	Green FEP
	1st protection layer		Stainless Steel spring	Stainless Steel spring		
	2nd protection layer		Stainless Steel braid	Stainless Steel braid		
	Outer Jacket	Green PFA	Black PU	Black PU	Green FEP	Green FEP
	Outer diameter (Max.)	4.10 mm / 0.157 in	4.10 mm / 0.161 in	10.90 mm / 0.429 in	5.90 mm / 0.232 in	5.85 mm / 0.230 in
Electrical Characteristics	Impedance	50 ohms ±1 ohm	50 ohms ±1 ohm	50 ohms ±1 ohm	50 ohms ±1 ohm	50 ohms ±1 ohm
	Operating frequency range	DC - 40 GHz	DC - 40 GHz	DC - 26.5 GHz	DC - 26.5 GHz	DC - 26.5 GHz
	Velocity of propagation	76%	84%	78%	78%	84%
	Time delay	4.4 ns/m; 1.3 ns/ft	4.0 ns/m; 1.2 ns/ft	4.3 ns/m; 1.3 ns/ft	4.3 ns/m; 1.3 ns/ft	4.0 ns/m; 1.2 ns/ft
	Capacitance at 1 GHz	88 pF/m; 26.7 pF/ft	79 pF/m; 24.1 pF/ft	85 pF/m; 25.8 pF/ft	85 pF/m; 25.8 pF/ft	79 pF/m; 23.9 pF/ft
	Screening effectiveness at 18 GHz	>90 dB	>90 dB	>90 dB	>90 dB	>90 dB
	Phase stability with bending	<0.4° / 360° / GHz	<0.4° / 360° / GHz	<0.4° / 360° / GHz	<0.4° / 360° / GHz	<0.4° / 360° / GHz
	Phase stability with temp.	<3°/m/GHz (-55 / +100°C)	<1.8°/m/Ghz (-55 / +100°C)	<4°/m/GHz (-55 / +100°C)	<1°/m/GHz (-55 / +100°C)	<1°/m/GHz (-55 / +100°C)
	Attenuation stability with bending	<0.05 dB at 18 GHz / <0.1 dB at 40 GHz	<0.05 dB at 18 GHz / <0.1 dB at 26.5 GHz	<0.1 dB at 18 GHz / <0.15 dB at 26.5 GHz	<0.1 dB at 18 GHz / <0.15 dB at 26.5 GHz	<0.05 dB at 18 GHz / <0.1 dB at 26.5 GHz
	Att. variation with temp.	Att. (at X°C) = att.(at 20°C) x (1 + (X - 20) x 0.002)				
Mechanical	Maximum weight	45 g/m - 14 g/ft	175 g/m - 53.4 g/ft	262 g/m - 79,4 g/ft	85 g/m - 25.9 g/ft	73 g/m - 22.1 g/ft
	Min. bend radius	12.5 mm - 0.492 in	20 mm - 0.788 in	25 mm - 0.984 in	25 mm - 0.984 in	25 mm - 0.984 in
	Crush resistance	> 1000 N / 100 mm	> 2 500 N / 100 mm	> 2500 N / 100 mm	> 800 N / 100 mm	> 700 N / 100 mm
Environmental	Operating temp. range (*)	-70 / +200° C -94 / +392° F	-55 / +100° C -67 / +212° F	-55 / +100° C -67 / +212° F	-70 / +200° C -94 / +392° F	-70 / +200° C -94 / +392° F
	Flammability	JAR25/FAR25853	JAR25/FAR25853	JAR25/FAR25853	JAR25/FAR25853	JAR25/FAR25853
	Halogen free jacket	No	No	No	No	No
Frequency/Attenuation	1 (dB /m - dB /ft)	0.51 - 0.15	0.3 - 0.09	0.26 - 0.08	0.26 - 0.08	0.23 - 0.07
	2	0.72 - 0.22	0.43 - 0.13	0.37 - 0.11	0.37 - 0.11	0.32 - 0.1
	4	1.04 - 0.32	0.61 - 0.19	0.54 - 0.16	0.54 - 0.16	0.46 - 0.14
	6	1.29 - 0.39	0.75 - 0.23	0.67 - 0.2	0.67 - 0.2	0.57 - 0.17
	8	1.51 - 0.46	0.87 - 0.27	0.79 - 0.24	0.79 - 0.24	0.66 - 0.2
	12.4	1.91 - 0.58	1.1 - 0.33	1 - 0.31	1 - 0.31	0.84 - 0.26
	18	2.35 - 0.72	1.33 - 0.41	1.24 - 0.38	1.24 - 0.38	1.02 - 0.31
	26.5	2.92 - 0.89	1.64 - 0.5	1.55 - 0.47	1.55 - 0.47	1.27 - 0.39
	32	3.25 - 0.99	1.82 - 0.55			
	40	3.7 - 1.13	2.05 - 0.62			
	Attenuation calculation (dB/m)	(0.49 x √F GHz) + (0.015 x F GHz)	(0.2955 x √F GHz) + (0.0045 x F GHz)	(0.25 x √F GHz) + (0.01 x F GHz)	(0.25 x √F GHz) + (0.01 x F GHz)	(0.22 x √F GHz) + (0.005 x F GHz)

SHF5MA/10	SHF5MPJ	SHF8PJ	SHF8MR	SHF8MA/10	SHF8MPJ	SHF13A
A / ULL	AHD / OD / ULL	AHD / OD	A / ULL	A / ULL	AHD / OD / ULL	A / ULL
Solid SPC	Solid SPC	Stranded SPC	Solid SPC	Solid SPC	Solid SPC	SPC Tube
Low density PTFE tape	Low density PTFE tape	PTFE tape	Low density PTFE tape	Low density PTFE tape	Low density PTFE tape	PTFE tape
SPC tape	SPC tape	SPC tape	SPC tape	SPC tape	SPC tape	SPC tape
SPC braid	SPC braid	SPC braid	SPC braid	SPC braid	SPC braid	SPC braid
Green FEP	Green FEP	Green FEP	Green FEP	Green FEP	Green FEP	PFA
Stainless Steel braid	Stainless Steel spring	Stainless Steel spring		Stainless Steel braid	Stainless Steel spring	Stainless Steel braid
Green FEP	Stainless Steel braid	Stainless Steel braid		Green FEP	Stainless Steel braid	
Black PA	Black PU	Black PU	Green FEP	Black PA	Black PU	Black PU
7.20 mm / 0.280 in	10.90 mm / 0.429 in	14.80 mm / 0.583 in	8.50 mm / 0.331 in	10.10 mm / 0.390 in	14.80 mm / 0.583 in	17.60 mm / 0.693 in
50 ohms ±1 ohm	50 ohms ±1 ohm	50 ohms ±1 ohm	50 ohms ±1 ohm	50 ohms ±1 ohm	50 ohms ±1 ohm	50 ohms ±1 ohm
DC - 26.5 GHz	DC - 26.5 GHz	DC - 18 GHz	DC - 18 GHz	DC - 18 GHz	DC - 18 GHz	100 kHz - 9,5 GHz
84%	84%	78%	84%	84%	84%	85%
4.0 ns/m ; 1.2 ns/ft	4.0 ns/m ; 1.2 ns/ft	4.2 ns/m ; 1.3 ns/ft	4.0 ns/m ; 1.2 ns/ft	4.0 ns/m ; 1.2 ns/ft	4.0 ns/m ; 1.2 ns/ft	3.9 ns/m ; 1.2 ns/ft
79 pF/m ; 23.9 pF/ft	79 pF/m ; 23.9 pF/ft	85 pF/m ; 25.8 pF/ft	79 pF/m ; 23.9 pF/ft	78 pF/m ; 23.6 pF/ft	79 pF/m ; 23.9 pF/ft	78 pF/m ; 23.6 pF/ft
>90 dB	>90 dB	>90 dB	>90 dB	>90 dB	>90 dB	>90 dB
<0.4° / 360° / GHz	<0.4° / 360° / GHz	<0.4° / 360° / GHz	<0.4° / 360° / GHz	<0.4° / 360° / GHz	<0.4° / 360° / GHz	<0.6° / 360° / GHz
<1°/m/GHz (-55 / +100°C)	<1°/m/GHz (-55 / +100°C)		<1°/m/GHz (-55 / +100°C)	<1°/m/GHz (-55 / +100°C)	<1°/m/GHz (-55 / +100°C)	
<0.05 dB at 18 GHz / <0.1 dB at 26.5 GHz	<0.05 dB at 18 GHz / <0.1 dB at 26.5 GHz	<0.1 dB (at 18 GHz)	<0.05 dB (at 18 GHz)	<0.05 dB (at 18 GHz)	<0.05 dB (at 18 GHz)	<0.05 dB
Att. (at X°C) = att.(at 20°C) x (1 + (X - 20) x 0.002)						
120 g/m - 36 g/ft	250 g/m - 75.8 g/ft	480 g/m - 145.4 g/ft	155 g/m - 47 g/ft	205 g/m - 62.1 g/ft	470 g/m - 142.4 g/ft	410 g/m - 124.2 g/ft
60 mm - 2.362 in	25 mm - 0.984 in	40 mm - 1.575 in	40 mm - 1.575 in	100 mm - 3.937 in	40 mm - 1.575 in	90 mm - 3.543 in
> 1000 N / 100 mm	> 2500 N / 100 mm	> 2500 N / 100 mm	> 1000 N / 100 mm	> 1000 N / 100 mm	> 2500 N / 100 mm	> 800 N / 100 mm
-50 / +105° C -67 / +221° F	-55 / +100° C -67 / +212° F	-55 / +100° C -67 / +212° F	-70 / +200° C -94 / +392° F	-50 / +105° C -58 / +221° F	-55 / +100° C -67 / +212° F	-55 / +100° C -67 / +212° F
self-extinguishable	JAR25/FAR25853	JAR25/FAR25853	JAR25/FAR25853	self-extinguishable	JAR25/FAR25853	JAR25/FAR25853
Yes	No	No	No	Yes	No	No
0.23 - 0.07	0.23 - 0.07	0.18 - 0.05	0.15 - 0.04	0.15 - 0.04	0.15 - 0.04	0.09 - 0.03
0.32 - 0.1	0.32 - 0.1	0.26 - 0.08	0.21 - 0.06	0.21 - 0.06	0.21 - 0.06	0.14 - 0.04
0.46 - 0.14	0.46 - 0.14	0.38 - 0.12	0.3 - 0.09	0.3 - 0.09	0.3 - 0.09	0.2 - 0.06
0.57 - 0.17	0.57 - 0.17	0.48 - 0.15	0.37 - 0.11	0.37 - 0.11	0.37 - 0.11	0.26 - 0.08
0.66 - 0.2	0.66 - 0.2	0.56 - 0.17	0.44 - 0.13	0.44 - 0.13	0.44 - 0.13	0.3 - 0.09
0.84 - 0.26	0.84 - 0.26	0.72 - 0.22	0.55 - 0.17	0.55 - 0.17	0.55 - 0.17	
1.02 - 0.31	1.02 - 0.31	0.9 - 0.27	0.68 - 0.21	0.68 - 0.21	0.68 - 0.21	
1.27 - 0.39	1.27 - 0.39					
(0.22 x √F GHz) + (0.005 x F GHz)	(0.22 x √F GHz) + (0.005 x F GHz)	(0.17 x √F GHz) + (0.01 x F GHz)	(0.14 x √F GHz) + (0.005 x F GHz)	(0.14 x √F GHz) + (0.005 x F GHz)	(0.14 x √F GHz) + (0.005 x F GHz)	(0.087 x √F GHz) + (0.007 x F GHz)