TNC COMPATIBILITY CHART

Performance

Female and male connectors of the same specification type are designed to provide the best matched condition when mated together. When female and male connectors of different specification types are mated, less than optimum electrical performance may be experienced even though they are mechanically compatible.

			MIL-C-87104/2 "AFTNC" [1]		MAURY 5E-053 [2] [4]		IEC 169-26 Grade 1		IEC 169-26 Grade 0		IEC 169-17 Grade 0		IEC 169-17 Grade 2		MIL-STD-348A TNC		MIL-STD-348A Test Conn [5]		MIL-STD-348A TNCA [6]		MIL-T-81490 [7]	
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
FREQ RANGE (GHz)			18		18		18		18		16		16		16		16		18		16	
MIL-C-87104/2 "AFTNC" [1]	M	18				OK		OK		OK	8	OK	8	OK	8	OK	8	OK		OK	8	3
	F				2		3		3		OK	8	OK	8	OK	8	OK	8	3		OK	8
MAURY 5E-053 [2] [4]	M	18						OK		OK	8	OK	8	OK	8	OK	8	OK		OK	8	OK
	F						OK		OK		OK	8	OK	8	OK	8	OK	8	OK		OK	8
IEC 169-26 Grade 1	M	18								OK	8	3	8	3	8	3	8	3		OK	8	3
	F								OK		OK	8	OK	8	OK	8	OK	8	OK		OK	8
IEC 169-26 Grade 0	M	18									8	3	8	3	8	3	8	3		OK	8	3
	F										OK	8	OK	8	OK	8	OK	8	OK		OK	8
IEC 169-17 Grade 0	M	16												OK		OK		OK	8	OK		3
	F												OK		OK		OK		3	8	OK	
IEC 169-17 Grade 2	M	16														OK		OK	8	OK		3
	F														OK		OK		3	8	OK	
MIL-STD-348A TNC	M	16																OK	8	OK		OK
	F																OK		3	8	OK	
MIL-STD-348A Test Conn [6]	M	16																	8	OK		OK
	F																		3	8	OK	
MIL-STD-348A TNCA [5]	M	18																			8	3
	F																				OK	8

[1] AFTNC is a Maury designation standing for "Air Force TNC". The Maury interface is identical to MIL-C-87104/2 except it has a solid outer conductor on the male and is rated to 19 GHz.

[2] Compression fit of mating dielectrics is possible with early designs.

[3] Mating will result in non-contacting outer conductors.

[4] The Maury 5E-053 TNC was originally designed in 1967 to be a general purpose TNC test connector compatible with commercially available TNC connectors. This connector has been improved over the years and is now fully compatible with all the above TNC connectors.

[5] Maury MIL-STD-348A TNCA interface is fully compliant with the specification. The Maury connector is rated to 19 GHz.

[6] MIL-C-39012 test connector has been replaced by the MIL-STD-348A test connector. Both specifications are identical.

[7] MIL-T-81490 EW TNC is rated to 16 GHz. The male connector interface of this specification is not fully defined.

[8] Frequency compatibility problem. These connectors should not be mixed except in cases where one connector has been chosen as a test connector and is characterized on a network analyzer for error corrected measurements.

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