

Performance Specification

DESCRIPTION	REQUIREMENT	METHOD																		
Braid Retention	When tested as specified, the braid shall not pull out nor shall slippage exceed .025 inch. Breakage of braid shall not be considered a failure.	Backshell shall be tested for Braid Retention to a tensile load of 50 pounds minimum. Backshell shall be mounted to a suitable fixture and the load shall be applied for 15 seconds minimum.																		
Hydraulic Stability	No increase in weight greater than 5%. Backshell shall meet coupling thread strenght.	ASTM D 570																		
Salt Spray	No excessive corrosion or exposure of base material detrimental to normal operation of the test samples.	EIA-364-26: 2,000 HR Salt Fog																		
Magnetic Permeability	Less than 2 Mu	EIA-354-54																		
Flammability	Non-mettallic materials shall be self-extinguishing. Vertical test, 12 seconds igniton, 15 seconds maxium burn time	FAR 25.853(a) Appendix F, Part I(a)(4)																		
Smoke	Materials shall be low smoke. The specific optical smoke density *Ds) shall not exceed 200.	FAR 25.853(a) Appendix F, Part V																		
Thermal Shock	No blistering, peeling or separation of plating	AS85049 Paragraph 4.6.16; EIA-364-32																		
Toxicity	Material shall be non-toxic. Toxic gas values shall not exceed the following values: <table border="1"> <thead> <tr> <th>Componenet</th><th>Maximum Allowed (PPM)</th><th>Actual (PPM)</th></tr> </thead> <tbody> <tr> <td>HCN</td><td>150</td><td>2.0</td></tr> <tr> <td>HF</td><td>200</td><td>1.0</td></tr> <tr> <td>HCL</td><td>500</td><td>1.0</td></tr> <tr> <td>SO₂</td><td>100</td><td>-</td></tr> <tr> <td>NO_x</td><td>100</td><td>-</td></tr> </tbody> </table>	Componenet	Maximum Allowed (PPM)	Actual (PPM)	HCN	150	2.0	HF	200	1.0	HCL	500	1.0	SO ₂	100	-	NO _x	100	-	BS7239
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Fluid Immersion	No Evidence of degradation detrimental to performance	AS85049 Paragraph 4.6.13; EIA-364-10																		
Fungus Resistance	Backshell shall be fungus inert	MIL-STD-810G Method 508.6																		
Ozone Exposure	No evidence of degradation due to ozone exposure that will adversely affect performance	EIA-364-14																		
Thermal Vaccume Outgassing	Shall not exceed 1.0 percent Total Mass Loss (TML) and 0.1% Collected Volatile Condensable Material (CVCM).	ASTM E 595																		
DC Resistance	The resistance between the braid, backshell and mating connector shall not exceed 2.5 milli ohms	"AS85049 Paragraph 4.6.3; EIA-364-83 34 AWG tinned copper, nickel copper and silver copper braid tested"																		
Vibration	No damage or loosening of parts	The backshells test samples shall be subjected to the test procedure EIA-364-28, condition IV. The entire frequency range from 10 to 2,000 Hz and then returned to 10 Hz shall be traversed in 20 minutes. This cycle shall be performed 12 times in each of the three mutual perpendicular directions for a total of 36 cycles. The motions shall be applied for approximately 12 hours.																		
Shock	No damage or loosening of parts	The backshell test samples shall be subjected to the test requirements specified in EIA-364-27B, condition E. In accordance with M83513 specificans, paragraph 4.5.15. In accordance with M83513 specifications, paragraph 4.5.15, one shock should be applied in each direction of the three major axis of the connector																		