



Standard Materials and Finishes		
DESCRIPTION	MATERIAL	FINISH
Pin Contact	Copper alloy	50 microinches gold over nickel
Socket Contact	Copper alloy, with stainless steel hood	50 microinches gold over nickel Contact hood: passivate
Insulators	High grade rigid dielectric	None
Seals	Fluorosilicone/silicone blend, blue	None
EMI Spring	Beryllium copper	Nickel
Shell, Coupling Nut, Jam Nut	Aluminum alloy or stainless steel	See sales drawing or catalog for finish options
Contact Retention Clip	Beryllium copper	None
Anti-Decoupling Ratchet Spring	Stainless steel	Passivate

Performance Specification				
TEST DESCRIPTION	REQUIREMENT			PROCEDURE
Dielectric withstanding voltage at sea level	Contact Size	Altitude	Voltage	
	20HD	Sea level	1800	
	22HD	Sea level	1300	
Dielectric withstanding voltage at altitude	Contact Size	Altitude	Voltage	
	20HD	50,000 ft	1000	
		70,000 ft	1000	
		100,000 ft	1000	
	22HD	50,000 ft	800	
		70,000 ft	800	
100,000 ft		800		
Insulation resistance at ambient temperature	5000 megohms minimum			MIL-DTL-38999M para. 4.5.11.1 EIA-364-20 Method A 2 mA maximum leakage current Unmated pairs
Insulation resistance at elevated temperature	1000 megohms minimum			MIL-DTL-38999M para. 4.5.11.2 EIA-364-20 Method A 2 mA maximum leakage current Mated pairs
Contact resistance at 25°C, crimp contacts	Wire Size	Test Current Amperes	Maximum Voltage Drop (millivolts)	
			Initial	After Conditioning
	20	7.5	55	66
	22	5	73	88
	24	3	45	54
	26	2	52	63
	28	1.5	54	65
	30	1	60	73
Contact resistance at 200° C, crimp contacts	Wire Size	Test Current Amperes	Maximum Voltage Drop (millivolts)	
			Initial	After Conditioning
	20	7.5	94	
	22	5	125	
	24	3	77	
	26	2	89	
	28	1.5	92	
	30	1	103	
Low level contact resistance, crimp contacts	Wire Size	Maximum Contact Resistance (milliohms)		
		Initial Values	After Conditioning	
	20	9	11	
	22	15	17	
	24	20	23	
	26	31	38	
	28	50	60	
30	75	88		