

MIL-DTL-38999 Contact Performance Specifications

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Test	Performance Specifications					
Current Rating	<i>(meets MIL-C-39029, paragraph 1.3.1)</i>					
	Contact Size	Maximum Amps				
		<i>Crimp</i>	<i>Hermetic</i>			
	22D	5	3			
	20	7.5	5			
	16	13	10			
Contact Millivolt Drop	<i>(meets MIL-C-38999, paragraph 3.17)</i>					
	Contacts in the mated condition shall meet the contact resistance requirements of the table shown below. Appropriate compensation may be made for resistance in the measured value which is due to an additional length of wire included in the measurement.					
	Contact Size	Maximum Millivolt Drop				
		<i>Crimp</i>	<i>Hermetic</i>			
	22D	73	85			
	20	55	60			
Contact Resistance at 25° C	<i>(meets MIL-C-38999, paragraph 3.17)</i>					
	Contacts in the mated condition shall meet the contact resistance requirements of the table shown below. Appropriate compensation may be made for resistance in the measured value which is due to an additional length of wire included in the measurement.					
	Class	Contact Size	Wire Size	Test Amperes	Millivolt Drop Maximum	
					Initial	After Conditioning
	H, N and Y	12	12	17	85	100
		16	16	10	85	100
20		20	5	60	75	
22D		22	3	85	95	

MIL-DTL-38999 CONTACT MATERIALS AND SPECIFICATIONS

Component	Material	Notes
Pin Contact	Beryllium copper alloy per ASTM B197, 50 microinches gold plated per ASTM B488 Type 3 Code C Class 1,27 over nickel plate per QQ-N-290 Class 2, 50-100 microinches	Approved for Space Flight
Pin Contact, Hermetic	Nickel-iron alloy per ASTM F30 (Alloy 52), 50 microinches gold plated per ASTM B488 Type 3 Code C Class 1,27 over nickel plate per QQ-N-290 Class 2, 50-100 microinches	Ferromagnetic material.
Socket Contact	Beryllium copper alloy per ASTM B197, 50 microinches gold plated per ASTM B488 Type 3 Code C Class 1,27 over nickel plate per QQ-N-290 Class 2, 50-100 microinches.	Approved for Space Flight
Socket Contact Hood	Stainless steel, passivated per AMS-QQ-P-35	Approved for Space Flight