

Specifications

SuperFly Datalink Standard Materials		
DESCRIPTION	MATERIAL	FINISH
Contacts	Copper alloy	Gold 50 microinches minimum over nickel
Shell, coupling nut, backshell	Aluminum alloy or stainless steel	Code M: Electroless nickel per ASTM B-733 Code MT: Nickel-PTFE per SAE AMS2454 Code ZR: Black zinc-nickel per ASTM B841 Code Z2: Gold per MIL-G-45204 Code ZMT: Nickel-PTFE per SAE AMS2454 over SST material
Insulators, PCB tray	High-grade rigid dielectric	None
Grommet	Fluorosilicone blend elastomer	None
O-rings	Fluorosilicone blend elastomer	None
Latching EMI spring	Stainless steel	Gold
Shield sleeve, ferrule	Copper alloy	Electroless nickel
Spline, SuperFly Datalink White	Copper alloy	Electroless nickel
Potting compound for 90° PCB	Epoxy	

SuperFly Datalink Performance Specifications														
DESCRIPTION	REQUIREMENT	PROCEDURE												
Operating temperature	-65° to +175°C													
Current rating	1.5 Amps													
Dielectric Withstanding Voltage (sea level)	500 Vrms	EIA-364-20												
Insulation resistance	5000 MΩ minimum	EIA-364-21												
Contact resistance, 25°C	55 millivolt maximum	EIA-364-06, 1.0 A test current, #24 AWG wire												
Shell-to-shell resistance	2.0 millivolt maximum	EIA-364-83												
Shielding effectiveness	<table border="1"> <thead> <tr> <th>Frequency</th> <th>Attenuation dB</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>75</td> </tr> <tr> <td>1000</td> <td>50</td> </tr> <tr> <td>3000</td> <td>44</td> </tr> <tr> <td>6000</td> <td>38</td> </tr> <tr> <td>10000</td> <td>35</td> </tr> </tbody> </table>	Frequency	Attenuation dB	100	75	1000	50	3000	44	6000	38	10000	35	EIA-364-66
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100	75													
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Ingress protection	IP67 rating	IEC-60529												
Vibration, sine	No discontinuity of greater than 1 microsecond, no cracking, breaking or loosening of parts, plug shall not become disengaged from receptacle.	EIA-364-28 Test Condition IV												
Vibration, random	No discontinuity of greater than 1 microsecond, no cracking, breaking or loosening of parts, plug shall not become disengaged from receptacle.	364-28 Test Condition V Letter I												
Mechanical shock	No discontinuity of greater than 1 microsecond, no cracking, breaking or loosening of parts, plug shall not become disengaged from receptacle.	EIA-364-27 Condition D												
Temperature cycling	No mechanical damage or loosening of parts. Following test, connector shall meet contact resistance, DWV, insulation resistance and shell-to-shell resistance requirements	EIA-364-32 Test Condition IV -65°C, +150°C .												
Humidity	No deterioration which will adversely affect the connector.	EIA-364-31												
Durability	2000 mating cycles													

Application Note: Sand and Dust Exposure

Unmated SuperFly® connectors should not be exposed to sand, dust or debris, which can be entrapped in the small contact cavities. Debris entrapment can cause excessive contact wear and possible failure. Unmated connectors should be fitted with dust caps or protective covers.