Molex 731000207 PDF

深圳创唯电子有限公司 http://www.molex-connect.com

MOLEX TAIWAN LTD (RF)

TITLE :

GENERAL SPECIFICATION FOR

50 OHM SMB SERIES CONNECTORS

REV	DESCRIPTION	SIGN
D	PER ECN 0942	Andy 961223
C	PER ECN 0845	Andy 960716
B	PER ECN 0778	Wilson 960321

TITLE : GENERAL SPECIFICATION FOR SPECIAL 50 OHM SMB SERIES CONNECTORS

Product Specification

DOCUMENT NO

PS - 73598-0099

Prepared By: R. Folds Date:950220

Checked By: Date 961227

Approved By: Date : 961230

1.0 SCOPE

This specification covers the performance requirements and characteristics for 50 OHM SMB SERIES CONNECTORS.

2.0 APPLICABLE DOCUMENTS SPECIFICATIONS

2.1 Per applicable Molex Material Spec. refer to Sales and Engineering Drawings.

3.0 PRODUCT DESCRIPTION

3.1 Product Name

50 OHM SMB SERIES CONNECTORS.

3.2 Material

Refer to respective sales drawing

3.3 Finishes

Refer to respective sales drawing.

4.0 RATINGS

Item	Rating
Working Voltage	500 VRMS @ Sea Level
Impedance	50 Ohm Nominal
Frequency Range	dc to 4 GHz
Temperature Range	-65 deg. C to +165 deg. C

5.0 PERFORMANCE SPECIFICATIONS

5.1 Electrical Performance

Test Item	Test Spec.	Test Condition
Insertion Loss	Initial: 0.30 x $(f)^{1/2}$ After environment:N/A f(GHz) : test frequency	dc to 4 GHz
Insulation Resistance	1000 megohms min.	500 V DC.
Dielectric Withstanding Voltage	1000 volts rms. min.	at sea level
VSWR	Initial:1.30 + (0.03 x f) per mated pair After environment:N/A f (GHz) : test frequency	dc to 4 GHz
Contact Resistance	Center Contact: 6.0 milliohms Max. Outer Contact: Initial:4.0 milliohms Max. After environment:N/A	

5.2 Mechanical Performance

Test Item	Test Spec.	Test Condition
Durability	a) no damage to interface b) meet the requirements of 5.1, and mating and unmating force requirement	After 500 mating cycles @ 12 cycles per minute
Center Contact Retention Force	4 pounds min. (axial)	
Mating Force	14 pounds max.	
Unmating Force	14 pounds max. 2 pounds min.	
Insertion Force (Center Contact)	2.5 pounds max.	
Withdrawal Force (Center Contact)	1 ounce min.	
Cable Retention Force -- Crimping	Cable O.D. --> Force min. <3.93 mm 5 lbs 3.94-4.80 mm 10 lbs 4.81-5.82 mm 20 lbs 5.83-6.33 mm 30 lbs >6.34 mm 40 lbs	
-- Non-crimping	40 lbs	

5.3 Environmental Performance

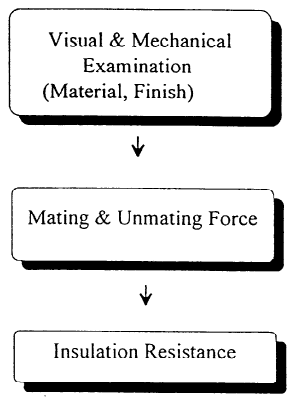
Test Item	Test Spec.	Test Condition
Corrosion (Salt Spray)	No exposure of the base metal on the interface or mating surface	MIL-STD-202F,Method 101D. Test Condition B. (less RF leakage)
Moisture Resistance	a) Insulation Resistance should be at least 200 megohms b) Parts will be tested for insulation resistance	MIL-STD-202F, Method 106F, (Less Step 7a & b)
Thermal Shock	a) No major effects to operating or physical properties. b) 1 hour duration.	MIL-STD-202F, Method 107G, Test Condition A
Vibration (High Frequency)--	a) No discontinuity greater than 1 m sec. b) Tolerance of vibration amplitude is +/- 10% c) Vibration frequency shall be varied logarithmically between 10 to 2,000 Hz. d) The entire frequency range of 10 to 2,000 Hz and return to 10 Hz shall be transgressed in 20 minutes.	MIL-STD-202F, Method 204D, Test condition B

Mechanical Shock -----	a) No discontinuity greater than 1 m.sec. b) An 11 m.sec. duration. c) 3 shocks in each direction.	MIL-STD-202F, Method 213B, Test Condition A

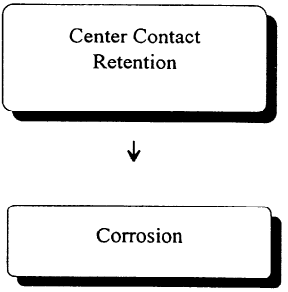
6.0 Test Sequence

All sample units shall be subjected to the inspection of group I. The samples shall then be divided into subgroups consisting of five each connectors. The sample units shall then be subjected to the inspection for their particular group.

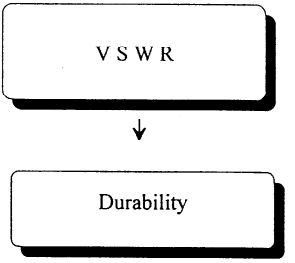
GROUP I



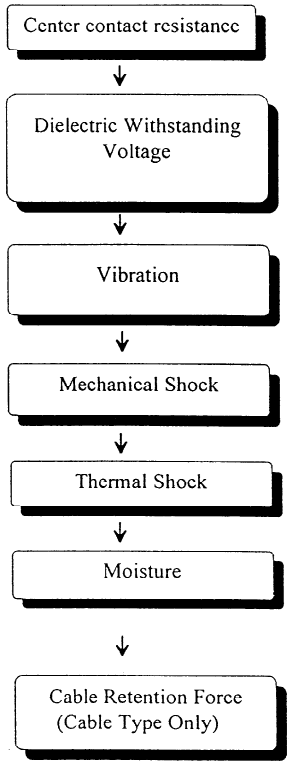
GROUP II



GROUP III



GROUP IV



REV	DESCRIPTION	SIGN
D	PER ECN 0942	Andy 961223
C	PER ECN 0845	Andy 960716
B	PER ECN 0778	Wilson 960321

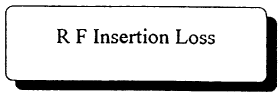
TITLE : GENERAL SPECIFICATION FOR SPECIAL 50 OHM SMB SERIES CONNECTORS

Product Specification

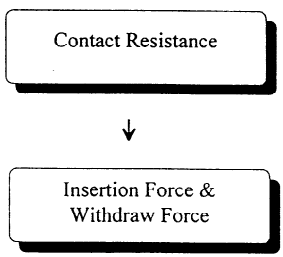
DOCUMENT NO
PS - 73598-0099

Prepared By: R. Fields Date:950220
Checked By: Date : 96127
Approved By: Date : 96123 0

GROUP V



GROUP VI



REV	DESCRIPTION	SIGN
D	PER ECN 0942	Andy 961223
C	PER ECN 0845	Andy 960716
B	PER ECN 0778	Wilson 960321

TITLE : GENERAL SPECIFICATION FOR SPECIAL 50 OHM SMB SERIES CONNECTORS

Product Specification

DOCUMENT NO

PS - 73598-0099

Prepared By: R. Fields Date:950220

Checked By: Date : 961227

Approved By: Date : 961230