

Excellent Integrated System Limited

Stocking Distributor

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[Molex Connector Corporation](#)
[0908140820](#)

For any questions, you can email us directly:

sales@integrated-circuit.com

		PRODUCTSPECIFICATION				LANGUAGE English	
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REVISE ON PC ONLY: W Addition of Reverse Footprint parts. ECN IPG2013-0094 D.Byrnes 2012-Aug-29				TITLE: PICOFLEX CONNECTOR SYSTEM PRODUCT SPECIFICATION			
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1.0 SCOPE This specification defines the performance characteristics for the PICOFLEX connector system.							
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5.0 MECHANICAL PERFORMANCE							
	ITEM	TEST CONDITION			REQUIREMENT		
5.1	Insertion Force (Per individual contact, 90327 & 93338 series only)	Insertion force tested by inserting standard gauge blade specified in Appendix A Rate of insertion = 25 ±6 mm/minute			1.7N maximum for initial insertion of Tin contact 1.5N maximum for initial insertion of PdNi/Gold contact		
5.2	Withdrawal Force (Per individual contact, 90327 & 93338 series only)	Withdrawal force tested by withdrawing standard gauge blade specified in Appendix A Rate of withdrawal = 25 ±6 mm/minute			Withdrawal force = 0.25N minimum		
5.3	Durability	1 durability cycle = 1 Mating & Un-mating of the connector using PicoFlex extraction tool or pull-tab For Tin on Tin system number of durability cycles = 30 For Gold on Gold system number of durability cycles = 100 For PdNi plated product number of durability cycles = 100 For 90816/93407 Latched maximum Cycles = 5(Tin or Gold) using Latched PicoFlex extraction tool.			Change in insertion force from initial value = 0.5N maximum Change in contact resistance from initial value = 10mOhms maximum		
5.4	Shock	Acceleration = 50g Duration = 11 milliseconds Per IEC 512-4, test condition 6c			Change in contact resistance from initial value = 10mOhms maximum Discontinuity = 1micro second maximum		
5.5	Vibration	Sweep = 10-55-10Hz Amplitude = 0.35mm or 5g Pulse = 1/2 Sine Duration = 2 hours in each X-Y-Z direction Per IEC 512-4, test condition 6d			Change in contact resistance from initial value = 10mOhms maximum Discontinuity = 1micro second maximum		
5.6	Terminal Retention Force in Housing (PCB Headers)	Terminal withdrawal force to be applied at the rate of 25 ± 6mm per minute			Terminal retention force = 7N minimum.		
5.8	Latched header retention force. (Reference only)	Connector retention force to be applied at the rate of 25 ± 6mm per minute. Straight and Right angle pull Minimum retention force.			Circuit Size	Straight	R/angle
					4ckt	30N	30N
					14 ckt	55N	115N
					26ckt	65N	175N
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6.7	Solder Heat Resistance 90325, 90584, 90779 90800, 90814/93405*, 91577 and 91714 series only (*90814/93405 standard profile parts).	Insert Terminal Solder Tails in solder bath: Solder Temperature: 230°C Duration: 5 seconds maximum		No damage that would impair normal operation																													
6.8	Resistance to Reflow Temperature 90814/93405*,90816, 93407 and 91330 series only (* 90814/93405 Low Profile parts only)	Subject unmated connectors to applicable re-flow profile shown in Appendix C		No damage that would impair normal operation																													
6.9	Glow Wire 90779, 90814,93405,90816,93 407, 91330, 91714 and 93338 series only	Glow wire temperature: 750°C Test positions shown in Appendix D Per IEC 60695-2-11		Flame must extinguish within 2 seconds of removal of glow wire No ignition of wrapping tissue 200mm under test specimen																													
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7.0 PACKAGING Parts shall be packaged to protect against damage during handling, transit and storage. No Styrofoam shall be used in any packing that comes in direct contact with the connectors.							
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8.0 TEST GROUPS										
TEST REF.	TEST	A	B	C	D	E	F	G		
4.1	Contact Resistance	2 4 6 8	2 4 6	2 4 6 9	2 4 6	2 4 6				
4.2	Insulation Resistance	9								
4.3	Dielectric Withstanding Voltage	10								
5.1	Insertion Force						1			
5.2	Withdrawal Force						2			
5.3	Durability	3	3	3	3	3				
5.4	Shock			8						
5.5	Vibration			7						
5.6	Terminal Retention Force in Housing (PCB Headers)							1		
5.8	Latched header retention force.							1		
6.1	Damp Heat	7								
6.2	Dry Heat	5								
6.3	Cold			5						
6.4	Thermal Shock		5							
6.5	Corrosive Atmosphere Sulphur Dioxide (SO ₂)				5					
6.6	Corrosive Atmosphere Hydrogen Sulphide (H ₂ S)					5				
6.7	Solder Heat Resistance	1	1	1	1	1				
6.8	Resistance to Reflow Temperature	1	1	1	1	1				
6.9	Glow Wire							1		

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PRODUCT SPECIFICATION

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LANGUAGE

English

APPENDIX A - INSERTION/WITHDRAWAL GAUGE SPECIFICATION

30° ±2°

7.00

Min.

2.30 ±0.05

0.10 ±0.05

0.25um

0.30 ±0.05

0.30 +0 -0.10

Note: Gauge weight = 25 grams minimum

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Series 91821 and 91935

2

4

1

3

Position 1

Position 2

Series 93338

Position 1

Position 2

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