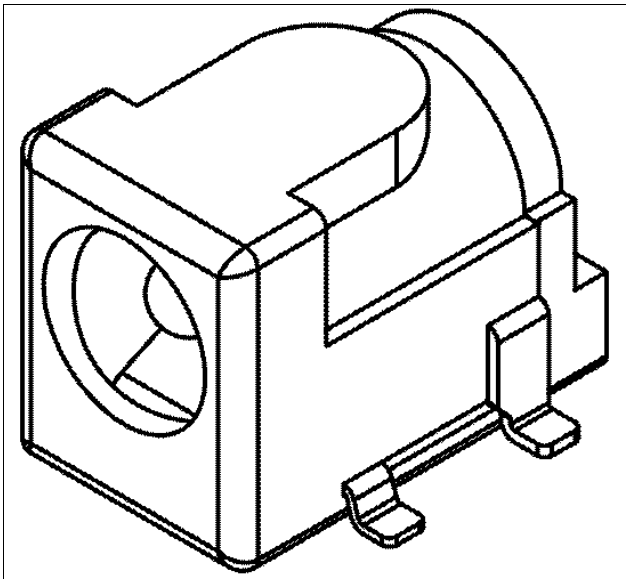
PRODUCT SPECIFICATION

Part Number	DCJ250-05			**Rev**	A	**Date**	19/12/14
Product Description	DC Power Jack, SMT, Horizontal, w/Locating Pegs, Ø2.50mm					**Page**	1
Doc Number	DCJ250-05	**Prepared**	**AO**	**Checked**	**VJ**	**Approved**	**ST**



PRODUCT SPECIFICATION

Part Number	DCJ250-05		**Rev**	A		**Date**	19/12/14
Product Description	DC Power Jack, SMT, Horizontal, w/Locating Pegs, Ø2.50mm					**Page**	2
Doc Number	DCJ250-05	**Prepared**	**AO**	**Checked**	**VJ**	**Approved**	**ST**

1.0 SCOPE.

DC Power Jack, SMT, Horizontal, w/Locating Pegs, Ø2.50mm.

2.0 PRODUCT NAME AND PART NUMBER.

DC Power Jack, Ø2.50mm: DCJ250-05.

3.0 PRODUCT SHAPE, DIMENSIONS AND MATERIAL.

Please refer to drawings.

4.0 RATINGS.

Current rating ……. 5.0 Amp Max

Voltage rating …… DC 20 Volts Max.

Operating Temperature Range …… -20°C to +70°C

Storage Temperature……. -25°C to +80°C

Storage Humidity…… Relative Humidity: ≤80%

5.0 TEST AND MEASUREMENT CONDITIONS.

Product is designed to meet electrical, mechanical and environmental performance requirements. specified in Paragraph 6.0. All tests are performed at ambient environmental conditions unless otherwise specified.

6.0 PERFORMANCE.

Item	Test Condition	Requirement
Examination of Product	Visual, dimensional and functional inspection as per quality plan.	Product shall meet requirements of product drawing and specification.

6.1 Electrical Performance.

Item	Test Condition	Requirement
Contact Resistance	Measure contact resistance of mated connector using test current of 10mA max and 20 mV open circuit voltage. In accordance with EIA-364-23.	30mΩ max initial
Insulation Resistance	Measure by applying test potential between the adjacent contacts, and between the contacts and frame. In accordance with EIA-364-21.	100 MΩ minimum @250V DC for 1 minute
Dielectric Strength	Measure by applying AC 500V between the adjacent contacts, and between the contacts and frame for 1minute. In accordance with EIA-364-20.	There shall be no breakdown.

6.2 Mechanical Performance.

Item	Test Condition	Requirement
Durability	5,000 cycles of operation at a rate of 20~30 cycles per minute. In accordance with EIA-364-09.	(1). Contact resistance: 50mΩmax. (2). Insertion and withdraw force: 3~30N. (3). Electrical characteristics and mechanical characteristics shall be satisfied. Without distinct damage.
Insertion and Extraction force	Operation Speed: 25.4 mm/min. Measure the force required to mate connector. In accordance with EIA-364-13.	Insertion and extraction force: 3~30N
Terminal Strength	A static force of 20N being applied to the centre pin in the X axis direction for 10sec.	There shall be no sign of damage mechanically and electrically.

Random Vibration	Mate connectors and subject to: 5.35 Gs RMS. For a period of 15 minutes in each of 3 mutually perpendicular axes. In accordance with EIA-364-28D.	No electrical discontinuity greater than 1 μsec. shall occur. No damage to product. Contact resistance: 50mΩ Max
Mechanical Shock	Accelerate Velocity: 30Gs Waveform: Half-sine shock plus Duration: 11msec Three shocks in each direction applied along three mutually perpendicular planes for a total of 18 shocks. In accordance with EIA-364-27	No electrical discontinuity greater than 1 μsec. shall occur. No damage to product. Contact resistance:50mΩ Max

6.3 Environmental Performance and Others.

Item	Test Condition	Requirement
Salt Water Spray	Air pressure of salt spray: 0.07 0.17Mpa; Salt Concentration: 5%; PH value:6.5-7.2; Temperature of salt-bath: 35±2℃; Test time: 24H(continuous). In accordance with EIA-364-26	Without excessive Corrosion or crack in appearance
Temperature Life (High)	Subject Jack to 80±2°C for 96 hours, after test in normal condition for 30mins. In accordance with EIA-364-17	(1). Contact resistance: 50mΩmax. (2). Insulation resistance: 50MΩmin. (3). There shall be no sign of damage mechanically and electrically.
Humidity Test	Subject Jack to 40±2℃ and humidity 90-95% for 96 hours, after test keep in normal condition for 30 minutes. In accordance with EIA-364-31.	
Temperature Life (Low)	Subject Jack to -25±2°C for 96 hours, after test in normal condition for 30mins. In accordance with EIA-364-59	
Temperature Rise	Measure the temperature rise of pin, when rated current is passed. In accordance with EIA-364-70 Method 1.	30°C Max

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Part Number	DCJ250-05			**Rev**	A	**Date**	19/12/14
Product Description	DC Power Jack, SMT, Horizontal, w/Locating Pegs, Ø2.50mm					**Page**	5
Doc Number	DCJ250-05	**Prepared**	**AO**	**Checked**	**VJ**	**Approved**	**ST**

Solderability	The tip of the terminals shall be dipped 2mm in the solder bath at a temperature of 240±5℃ for 3±0.5sec.	A new uniform coating of solder shall cover a minimum of 95% of the surface being immersed.
Resistance to Hand Soldering Heat	The jack shall be hand soldered at the temperature of 350±5℃ in 3±1sec after which measurement shall be made.	Electrical characteristics and mechanical characteristics shall be satisfied. Without distinct damage.
Resistance to Soldering Heat.	The jack shall be placed into the temperature of 260±5℃ in 5±1sec(Automatic soldering)	Electrical characteristics and mechanical characteristics shall be satisfied. Without distinct damage.

PRODUCT SPECIFICATION

Part Number	DCJ250-05			Rev		A	Date	19/12/14
Product Description	DC Power Jack, SMT, Horizontal, w/Locating Pegs, Ø2.50mm						Page	6
Doc Number	DCJ250-05	Prepared	AO	Checked	VJ		Approved	ST

7.0 PRODUCT QUALIFICATION AND TEST SEQUENCE

Test Item	Group										
	A	B	C	D	E	F	G	H	I	J	
Examination of Product	1,12	1,3	1,9	1,6	1,8	1,3	1,3	1,5	1,6		
Contact Resistance	2,9		2,6	2,5	2,6			2,4	2,5		
Insulation Resistance	3,10		3,7		3,7						
Dielectric Withstanding Voltage	4,11		4,8		4						
Durability	6										
Temperature Rise	7										
Insertion and Extraction force	5,8										
Terminal Strength		2									
Humidity			5		5						
Solderability						2					
Resistance to Soldering Heat							2				
Resistance to Hand Soldering Heat											
Salt Spray								3			
Temperature (Heat)									3		
Temperature (Cold)									4		
Random Vibration				3							
Mechanical Shock				4							

PRODUCT SPECIFICATION

Part Number	DCJ250-05			**Rev**	A	**Date**	19/12/14
Product Description	DC Power Jack, SMT, Horizontal, w/Locating Pegs, Ø2.50mm					**Page**	7
Doc Number	DCJ250-05	**Prepared**	**AO**	**Checked**	**VJ**	**Approved**	**ST**

Revision details:-

Revision	Information	Page	Release Date
A	Specification Released	-	19/12/2014

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