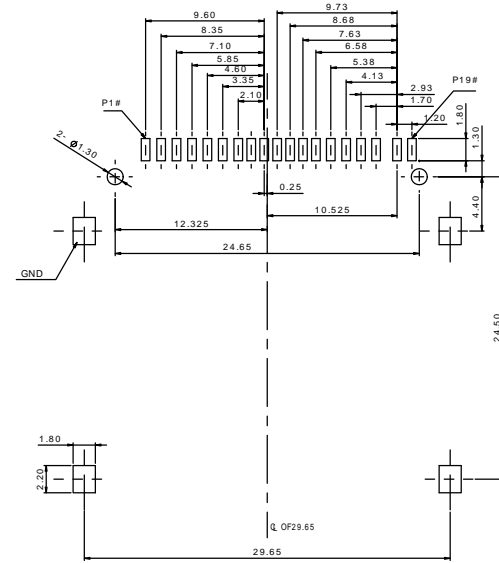
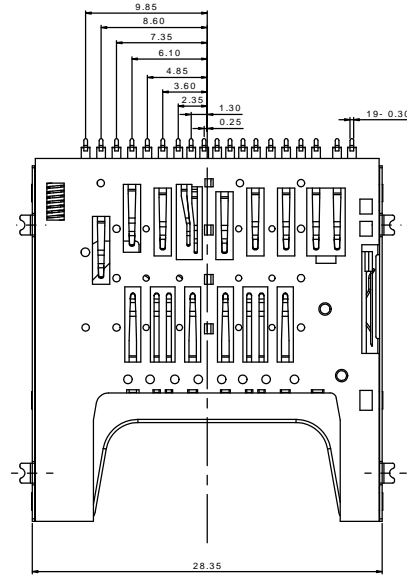
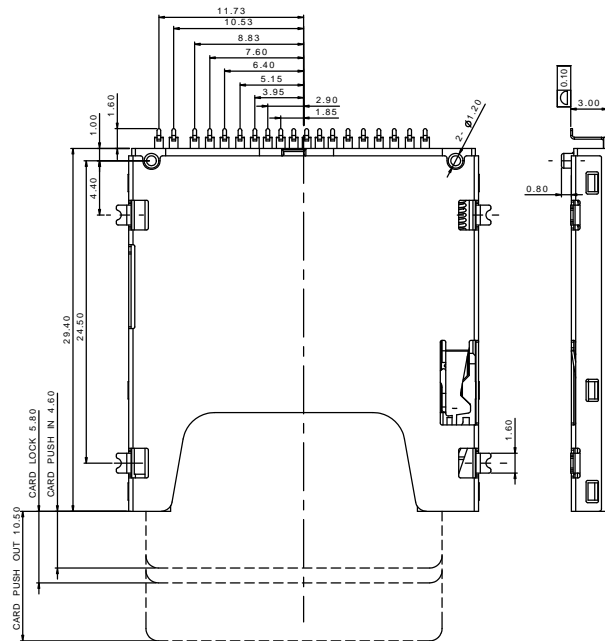


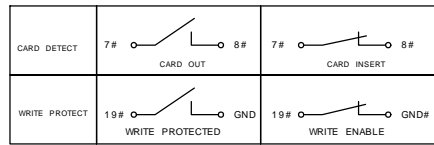
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RECOMMENDED PCB LAYOUT

TOLERANCE UNLESS OTHERWISE IS ±0.05



DESCRIPTIONS:

SD Connector
 Type: SMT
 Green Option: RoHS (Matte) (Halogen Free)
 Contact Number: 19
 Contact Area Plating: 1µ" Gold
 Solder Tails: Tin
 Apply Type: Reverse Type (Push)
 Shell Options: Stainless
 Fill It with "0"
 Packing Type: Tray
 Insulator Color: Black

PIN	NAME	DESCRIPTION
1	VSS3	GROUND
2	DAT2	DATA LINE BIT2
3	D0+	DIFFERENTIAL DATE 0+
4	CD/DAT3	CARD DETECT/DATA LINE BIT3
5	D0-	DIFFERENTIAL DATE 0-
6	CMD	COMMAND/RESPONSE
7	CD	CARD DETECT
8	VSS1	SUPPLY VOLTAGE GROUND
9	VSS4	GROUND
10	VDD2	SUPPLY VOLTAGE (1.8V)
11	VDD1	SUPPLY VOLTAGE
12	D1-	DIFFERENTIAL DATE 1-
13	CLK	CLOCK
14	D1+	DIFFERENTIAL DATE 1+
15	VSS2	SUPPLY VOLTAGE GROUND
16	VSS5	GROUND
17	DAT0	DATA LINE BIT0
18	DAT1	DATA LINE BIT1
19	WP	WRITE PROTECT

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NOTES:

- All Dimensions are in Millimeters
- Operation Voltage: 10VAC max.
- Current Rating: 1 Amps max.
- Contact Resistance: 100 m ohms max.
- Insulation Resistance: 1000M ohms min. @ 500 VDC
- Dielectric Withstanding Voltage: 500 VAC/1 Minute
- Operating Temperature: -20°C To +60°C
- Storage Temperature: -40°C To +70°C
- Durability 10000 Cycles.

RoHS compliant acc. to directive 2011/65/EU

Unless otherwise specified : Dimensions are in millimeters ANG. ± 5° .0 ±0.35 .0 ±0.30 .00 ±0.25	REV.	REVISION DESCRIPTION	INITIALS	REV. DATE	
	▲				
Order / Article No. 24-02709	DO NOT SCALE DRAWING			CLASSIFICATION: SD UHSII Card push/push SMT, Reverse mount	
NOTES:	ANGLE PROJECTION:	DESIGN	NAME	DATE	TITLE:
	⊕		MEZ	17.10.2014	FPS017T-1000-AL-R
		DRAWN	MEZ	17.10.2014	DWG NO.:
		CHECKED	SLS	28.10.2014	Customer-P(799)A13
WEIGHT:					REVISION: 0
					SCALE: None SHEET 1 OF 4 A3 - ASSEMBLY

SPECIFICATIONS:

1.0: SCOPE

This specification covers the requirements for product performance and test methods of the SD4.0 connector . Product shall be of the design, construction and physical dimensions specified in the applicable product drawing

2.0: Rating:

- 2.1 Current rating: 1A AC/DC Min
- 2.2 Rated voltage: 250V RMS
- 2.3 Operating Temperature: -20°C~+60°C
Storage Temperature:-40°C~+70°C
- 2.4 Relative humidity: 95%Maxmum (non-condensing)

3.0: Test Condition:

- 3.1 Temperature range: 20°C +5°C
- 3.2 Humidity range: 25%~85%

4.0: Test Methods and Requirements:


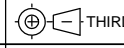
- 4.1 Examination of product:

Item	Test Description	Test Methods	Requirement
4.1.1	Examination of product	Shall be confirmed with eyes in accordance with each drawing.	Outward appearance shall be good without such injurious problem.

4.2 Electrical Performance:

Item	Test Description	Test Methods	Requirement
4.2.1	Contact Resistance	Mate card measured dry circuit, 20 m volts Max. 1mA Max. [EIA - 364-23]	40 mΩ Max. Initial 100mΩ Max. Final
4.2.2	Insulation Resistance	Apply 500V DC between adjacent pins or pin and ground [EIA -364-21]	1000MΩ Min Initial 100 MΩ Min Final
4.2.3	Dielectric Withstanding Voltage:	Apply 500V AC for 1 minute between adjacent terminals and ground. [EIA-364-20]	No breakdown

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DWG NO.: Customer-P(799)A13				REVISION:	0
WEIGHT:				SCALE: 1:11	SHEET 2 OF 4
				A3 - ASSEMBLY	

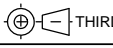
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4.3 Mechanical Performance			
Item	Test Description	Test Methods	Requirement
4.3.1	Insertion Force	Push the card in at the speed rate of 25±3mm/minute. [EIA -364-13]	SD Card 4000gf Max
			MMC Card 4000gf Max
			SD4.0 Card 4000gf Max
4.3.2	Withdrawal Force	Drag the card out at the speed rate of 25±3mm/minute. [EIA -364-13]	SD Card 200gf min
			MMC Card 100gf min
			SD4.0 Card 100gf Min
4.3.3	Durability	Insertion and extraction are repeated 10,000 cycles with the card at the speed rate of 400-600 cycles/hour. [EIA -364-09]	Appearance no damage. After test contact resistance 100 mΩ Max.
4.3.4	Vibration	Mate card and subject to the following vibration conditions, for a period of 2 hours in each of 3 mutually perpendicular axes, passing DC 1mA during the test. Amplitude: 1.50mm p-p or 19.6m/s ² (2G) Frequency: 10-55-10Hz Shall be traversed in 1 minute. [EIA -364-28]	Appearance no damage. After test contact resistance 100 mΩ MAX. Discontinuity 0.1microsec.Max.
4.4 Environmental performance and others			
Item	Test Description	Test Methods	Requirement
4.4.1	Solder ability	Temperature: 260 oC +5°C Time:10s Max. [EIA 364-52]	95% Min. of immersed area Must show no voids..
4.4.2	Humidity	Temperature: 40+2 oC Humidity: 90%(RH) Period: 8 hours [EIA-364-31], Test condition A method III	Appearance no damage. After test contact resistance 100 mΩ MAX.

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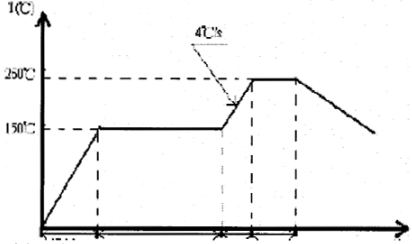
Unless otherwise specified : Dimensions are in millimeters	REV.	REVISION DESCRIPTION	INITIALS	REV. DATE
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Order / Article No. 24-02709	DO NOT SCALE DRAWING			CLASSIFICATION: SD UHSII Card push/push SMT, Reverse mount
NOTES:	ANGLE PROJECTION:	DESIGN	NAME	DATE
	 THIRD	DRAWN	MEZ	17.10.2014
		CHECKED		
				TITLE: FPS017T-1000-AL-R
				DWG NO.: Customer-P(799)A13
				REVISION: 0
WEIGHT:				SCALE: 1:11 SHEET 3 OF 4 A3 - ASSEMBLY




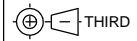
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4.4.3	Resistance to soldering heat	 <p>Solder time: 10s Max. Solder temperature: 250 °C ±5 °C</p>	Appearance no damage
4.4.4	Thermal shock	<p>Absolute humidity: $\leq 20 \text{ g/m}^3$, Subject mated connectors to 24 cycles Between -40°C to +85°C. One cycle: 85°C (45 minute), 15 Sec. change to -40°C, -40°C(45 minute), 15 Sec. change to 85°C.</p> <p>[EIA-364-32], Test condition I</p>	Appearance no damage. After test contact resistance 100 mΩ MAX.
4.4.5	Salt spray	<p>Mate card and exposed to the following salt mist conditions. Upon completion of the exposure period, salt deposits shall be removed by a gentle wash or dip in running water, after which the specified measurements shall be performed.</p> <p>NaCl solution: Concentration:5% Spray time: 8hours Ambient temperature: 35 oC +2 oC</p> <p>[EIA-364-26]</p>	Appearance no damage. After test contact resistance 100 mΩ MAX.

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Order / Article No. 24-02709		DO NOT SCALE DRAWING			CLASSIFICATION: SD UHSII Card push/push SMT, Reverse mount								
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DESIGN	MEZ	17.10.2014											
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SCALE: 1:11		SHEET 4 OF 4	A3 - ASSEMBLY										

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