

SPECIFICATION FOR APPROVAL

CUSTOMER: _____

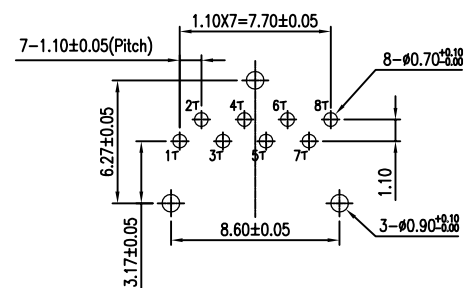
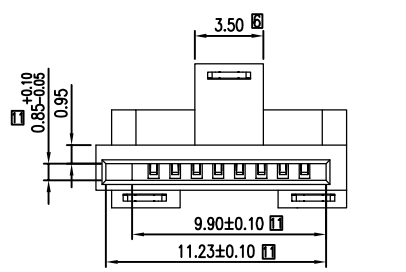
PART NAME: _____

PART NO: MSDV-2008-AKA0T01 REVISION: A _____

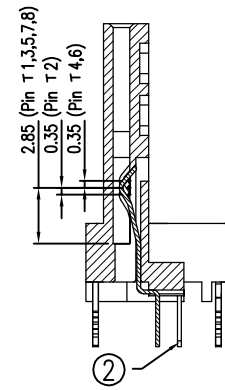
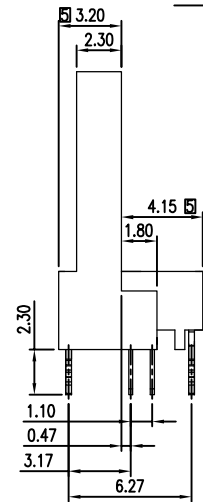
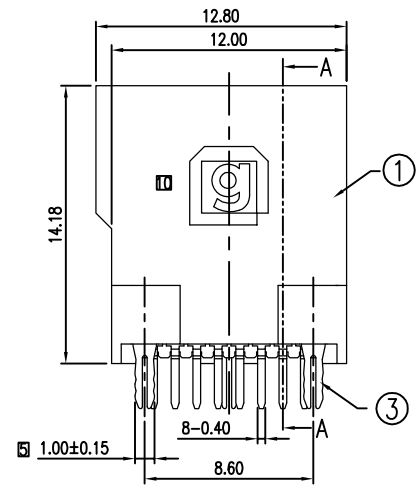
DESCRIPTION: MICRO SD CARD VERTICAL DIP TYPE _____

	MANUFACTURE SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY:		
DATE:		

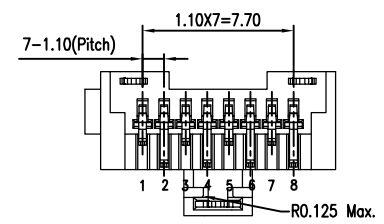
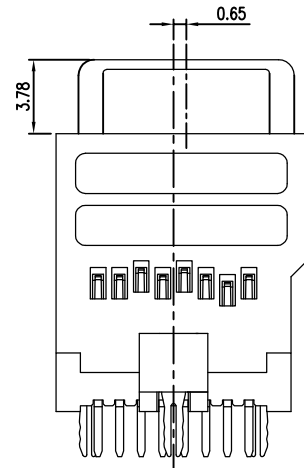
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Recommended PCB layout



SECTION A-A



PinT	Description
1	DAT2
2	CD/DAT3
3	CMD
4	V _{DD}
5	CLK
6	V _{SS}
7	DAT0
8	DAT1

13	ADD PACKAGE OPTION	Terry	07/16/19'
12	CHANGE NOTES 3a, WAS -25°C	AXL	10/3/16'
11	MODIFY TOLERANCE	Terry	07/21/10'
10	ADD LOGO	Terry	07/07/10'
9	ADD FILLET	Terry	05/27/10'
8	ADD CHAMFER	Terry	05/25/10'
7	MODIFY DRAWING	Terry	05/14/10'
6	CONTACT PLATING	Terry	05/04/10'
5	MODIFY BOARD LOCK	Terry	04/29/10'
4	MODIFY BOARD LOCK	Terry	04/27/10'
3	MODIFY DRAWING	Terry	04/22/10'
REV.	ECN NO.	NAME	DATE

TOLERANCE	
LINEAR	ANGLES
X.±0.50	X°.±3°
.X±0.40	.X°±3°
.XX±0.30	.XX°±3°
.XXX±0.15	.XXX°±3°

GENESIS TECHNOLOGY, INC
A Genesis Electro-Mechanical Company

Chung-Yang Rd.
Tu-Cheng City 7F, No. 191, Sec. 2
Taipei Hsien, Taiwan

APPD: _____ MAT'L: _____
CHKD: Terry FINISH: _____
DRWN: Terry Q'TY: _____

TITLE: MICRO SD CARD VERTICAL DIP TYPE			
PART NO. MSDV-2008-AK*0*01			
DWG NO. GTi10-25051			
UNITS	SCALE	SHEET	REV
mm	NONE	10F2	13

2 Notes:

1. Electrical:
 - a. Voltage Rating: 50VAC (r.m.s)
 - b. Current Rating: 0.5Amperes.
 - c. Insulation Resistance: 1000M ohms min. initial.
 - d. Dielectric Withstand Voltage: AC 500V/1 minute.
 - e. Contact Resistance: 100 m ohms max. initial;

2. Mechanical:
 - a. Material:
 - Contacts: Phosphor Bronze, T=0.2mm.
 - Board Lock: Brass, T=0.3mm.
 - Housing Flammability Rating: PBT, Black, UL94V-0
 - b. Plating:
 - Contacts: Gold plated 12u", Solder tail Tin plated 80u", 50u" nickel underplated overall.
 - Board Lock: Tin plated 80u", 50u" nickel underplated overall.
 - c. Durability: 10,000 Cycles.
 - d. Mating force: 25N Max.
 - Unmating force: 1.5N Min.
 - e. Solderability: More than 90% of solderable area
 - f. Soldering Profile: 260° for 10 seconds without remarkable deterioration.

3. Environmental:
 - a. Operating Temperature: -40°C to +85°C.
Storage Temperature: -40°C to +85°C.
 - b. Steady State Humidity: 90%~95% humidity on 40±2°C for 96hours.
 - c. Thermal Shock: 5 cycles of -55°C to 85°C.
 - d. Vibration Resistance: With dummy card applying DC 100mA,
Frequency: 10-2000Hz
Acceleration: 20m/s²
Sweep rate: 10-2000-10Hz in 5min.
Duration: 50min.(10 cyc)
Specimen to be excited along X,Y,and Z axes.(total:150min)
 - e. Impact Resistance: With dummy card applying DC 100mA,
Shock Waveform: Half sinewave
Acceleration: 490m/s²
Impact duration: 11msec.
9 total impacts delivered 3 each along X,Y, and Z axes. (total:9 impacts)
 - f. After test, contact resistance increase 40m ohms Max.

4. Compliance:
 - a. RoHS Compliance.

PART. NUMBER

MSDV-20 08 - A K * 0 * 01
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

1. CONNECTOR:
MSDV: MICRO SD CARD.
2. TYPE
20: MICRO SD CRAD VERTICAL DIP TYPE
3. POSITIONS
08: 08 POSITION
4. INSULATOR MATERIAL
A: PBT
5. INSULATOR COLOR
K: BLACK
6. CONTACT PLATING
A: GOLD PLATING 12u'
7. SHIELD PLATING
0: NONE SHIELD
8. SHIELD PLATING
T: TRAY
R: TAPE REEL

PART NO.	MSDV-2008-AK*0*01	SHEET	REVISION
DWG NO.	GTi10-25051	2 OF 2	SEE SHEET 1

GENESIS TECH ELECTRONICS INC.

PRODUCT TEST REPORT

GENESIS PN: GT110-25051

1 SCOPE

This specification covers the performance requirements of the MICRO SD CARD Connector.

2 APPLICATION DOCUMENT

This following documents form a part of this specification to this extent specified herein. In the event of conflict between the requirements of the specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

3 REQUIREMENTS

3.1 DESIGN AND CONSTRUCTION

Product shall be of the design, construction and physical dimensions specified on the applicable product drawing.

3.2 MATERIAL

- A. Housing : PBT ,Black, UL94V-0
- B. Contact s : Phosphor bronze, T=0.2mm, Gold plated 12u", Solder tail Tin plated 80u", 50u" Nickel underplated overall.
- C. Board Lock : Brass, T=0.3mm, Tin plated 80u", 50u" Nickel underplated overall..

3.3 RATINGS

- A. Current rating : 0.5 Amps
- B. Voltage rating : 50VAC (r.m.s)
- C. Operating temperature : -25°C to +85°C.

3.4 STORAGE CONDITIONS

temperature : $25 \pm 5^\circ\text{C}$; Humidity : 50% - 70%
Storage time : Should not exceed 180 days.

3.5 CONDITION OF FLOW , BY HAND AND REFLOW

Soldering process : 260°C , 10sec (pre-heat= $120 \pm 10^\circ\text{C}$, 120 sec)
By hand: $350 \pm 5^\circ\text{C}$, 3 ± 0.5 sec

3.6 MEASURING CONDITIONS

All measurements and test shall be made at a temperature 10°C to 35°C with a relative humidity of 45%RH to 85%RH under standard atmospheric pressure unless otherwise specified conditions.

3.7 ELECTRICAL PERFORMANCE

GENESIS TECH ELECTRONICS INC.

PRODUCT TEST REPORT

GENESIS PN: GT110-25051

Parameter	Procedure	Requirement
Insulation resistance	Measurements shall be made following application of DC 500V potential across terminals and across terminals and frame for 1 minute.	1000M Ω minimum
Dielectric withstanding voltage	500V AC/RMS (50Hz or 60Hz) shall be applied across terminals and across terminals and frame for 1 minute	There shall be no breakdown
Contact resistance	Being measured at 1KHz small current and voltage(20mA,20mV) by contact resistance meter.	Contact resistance: 100 m Ω max initial.

3.8 MECHANICAL PERFORMANCE

Parameter	Procedure	Requirement
Insertion and extraction force	Insert plug gauge into the specimen and extract for test, and then measure the insertion and extraction force.	Insertion force: 25 N Max Extraction force :1.5N Min
Durability	10,000 cycles of operation at a rate of 25mm per minute with unloading	(1) Contact resistance: 100m Max. (2) Insertion force: 25N Max (3) Extraction force : 1.5N Min

3.9 ENVIRONMENTAL PERFORMANCE

Parameter	Procedure	Requirement
Vibration	With dummy card applying DC 100mA, Frequency: 10-2000Hz Acceleration: 20m/s ² Sweep rate: 10-2000-10Hz in 5min. Duration: 50min.(10 cyc) Specimen to be excited along X,Y,and Z axes.(total:150min)	Contact resistance: 40 m Ω Max
Humidity	Subject mated connectors to 96 hours at 40°C with 90% RH to 95% RH. Test after keeping in normal condition for 30 minutes	Contact resistance:40 m Ω Max
Temperature life	Subject mated connectors to temperature life at +70°C for 96 hours.	Contact resistance:40 m Ω Max
Thermal shock	Subject mated connectors to 5 cycles between -55°C and +85°C	Contact resistance:40 m Ω Max
Salt spray	Subject mated connector to ambient according ASTM 117 for 4 hours	Contact resistance:40 m Ω Max

GENESIS TECH ELECTRONICS INC.

PRODUCT TEST REPORT

GENESIS PN: GT110-25051

Solderability	The tip of the terminals shall be dipped 2mm in the solder bath at temperature of 245 °C For 3 seconds	More than 90% of solderable area shall be covered
Soldering profile	Solder temperature 260°C for 10 seconds	Without deformation of case or excessive looseness of terminals electrical characteristics shall be satisfied