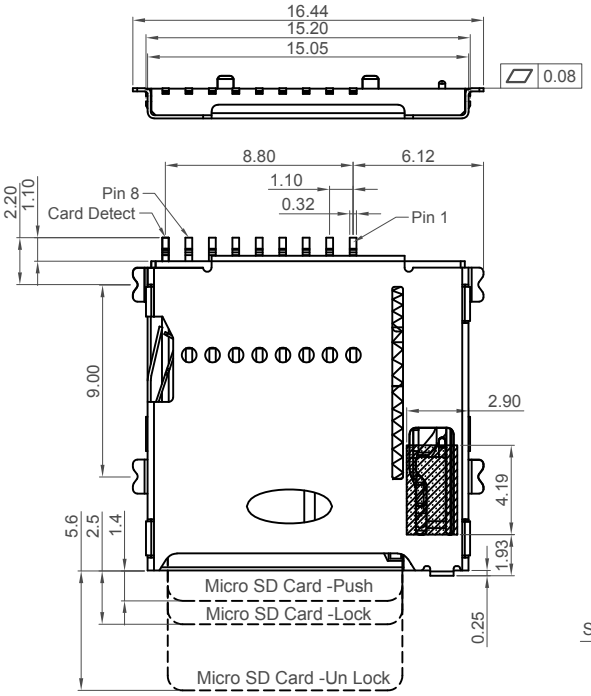
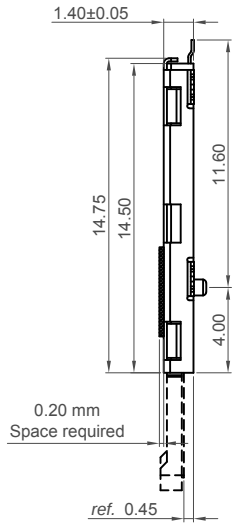
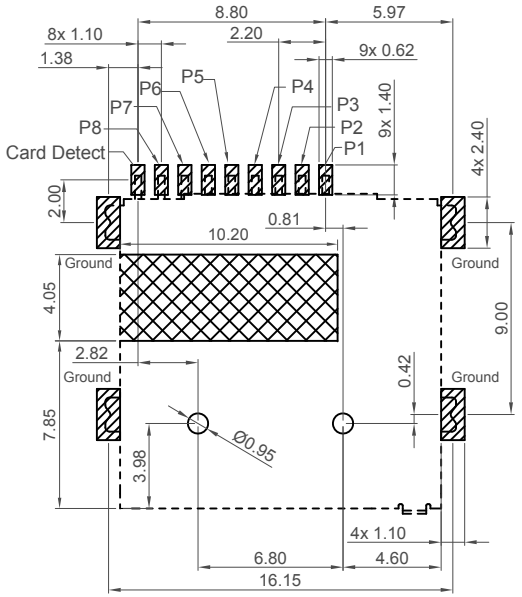


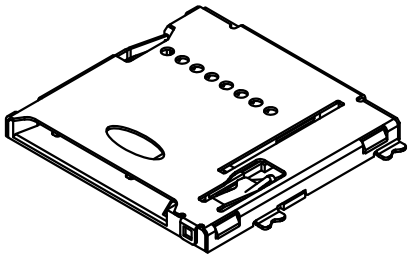




Recommended PCB Layout

As viewed from component side *General Tolerance: ±0.05*

Solder Area | Keep Out Area | Component Outline



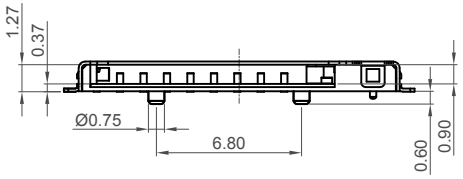
Specifications

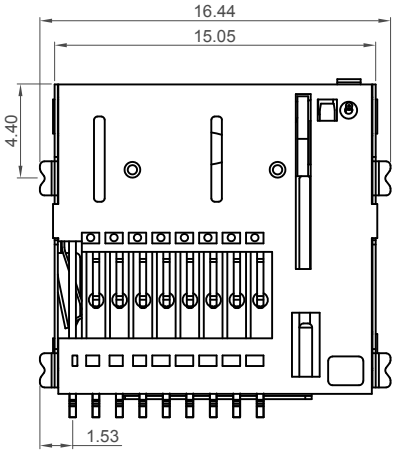
Material
- Housing: Hi-temp Thermoplastic,UL94V-0,Black
- Contact Terminal: Copper Alloy
- Metallic Shell: Stainless Steel
- Coil Spring: SWP
- Latch: Stainless Steel
- Slider: Hi-temp Thermoplastic,UL94V-0,Black
- CD Pin: Copper Alloy

Plating
- Contact Terminal&CD Pin:
  - Under-plating: 50µ" min. Nickel all over
  - Contact Area: 1u" Au min
  - Soldering Area: Gold Flash
- Metallic Shell:
  - Under-plating: 50µ" Nickel all over
  - Soldering Area: Gold Flash

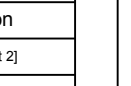
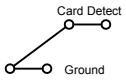
Electrical
- Voltage Rating: 30V AC/DC
- Current Rating: 0.5A per pin.
- Contact Resistance: 100mΩ max.
- Insulating Resistance: 1000MΩ min.
- Dielectric Withstand Voltage: 500 V AC

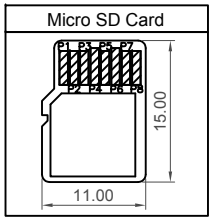
Mechanical & Environmental
- Operating Temperature: -25°C to +85°C
- Durability: 5000 Cycles
- Lock/Release Force: 10N (1.02 kgF) max





Micro SD Card Pin Assignment			
Pin	Name	Type	Description
P1	DAT2	I/O/PP	Data Line [Bit 2]
P2	CD/DAT3	I/O/PP	Card Detect/Data Line [Bit 3]
P3	CMD	PP	Command/Response
P4	V_{DD}	S	Supply Voltage
P5	CLK	I	Clock
P6	Vss	S	Supply Voltage Ground
P7	DAT0	I/O/PP	Data Line [Bit 0]
P8	DAT1	I/O/PP	Data Line [Bit 1]

Card Detect Switch Circuit	
	
Without Card (Normally Open)	Card Inserted



Ordering Grid

MEM2075 — 00 — 140 — 01 — A

Request Samples and Quotation

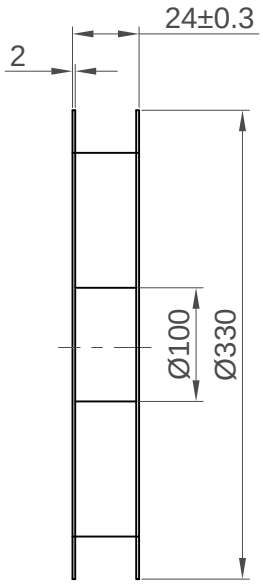
Switch
00 = Normally Open

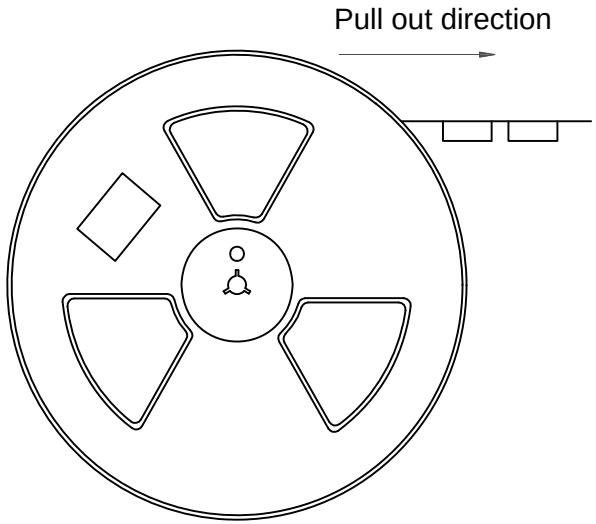
Locating Post
01 = With

Packing Options
A = Tape & Reel *(1000 per Reel)*

Part Number	Product Description
MEM2075	Micro SD Memory Card Connector,1.40mm Profile SMT, Push-Push, with Normally open Switch
Drawing Date: 19th December 2017	

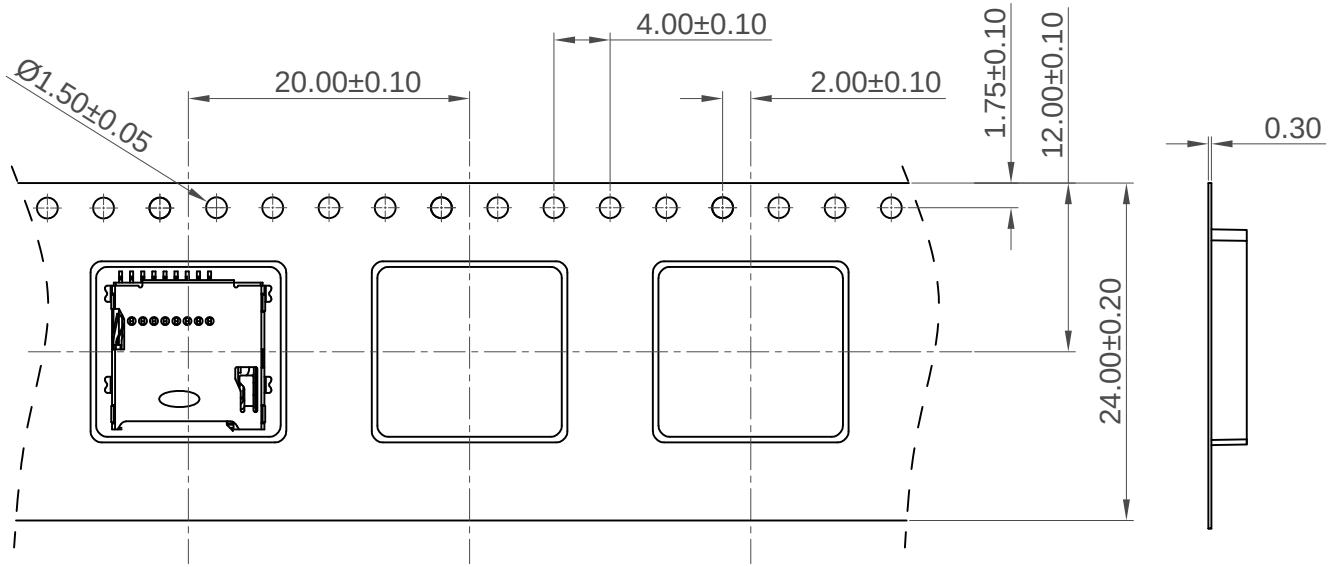
By	CC	Tolerances (Except as Noted) Length	Angle	Units: Metric (mm)	RoHS COMPLIANT 2011/65/EU Deca-BDE	©	GCT www.gct.co
Detail	Drawing Release	X.X ±0.25 X.XX ±0.15 X.XXX ±0.100	±1°	3rd Angle Projection		This drawing is confidential and copyright of Global Connector Technology, Ltd (GCT). This drawing must not be copied or disclosed without written consent. E & OE	Not to Scale / Drawn By CC / Sheet No. 1/2
Revision	A1						
Date	10/09/20						





Pcs/Reel	Reels/Carton	Pcs/Carton	Carton Dimensions
1000	10	10000	345 x 345 x 315mm

Quantity:1000 pcs/Reel

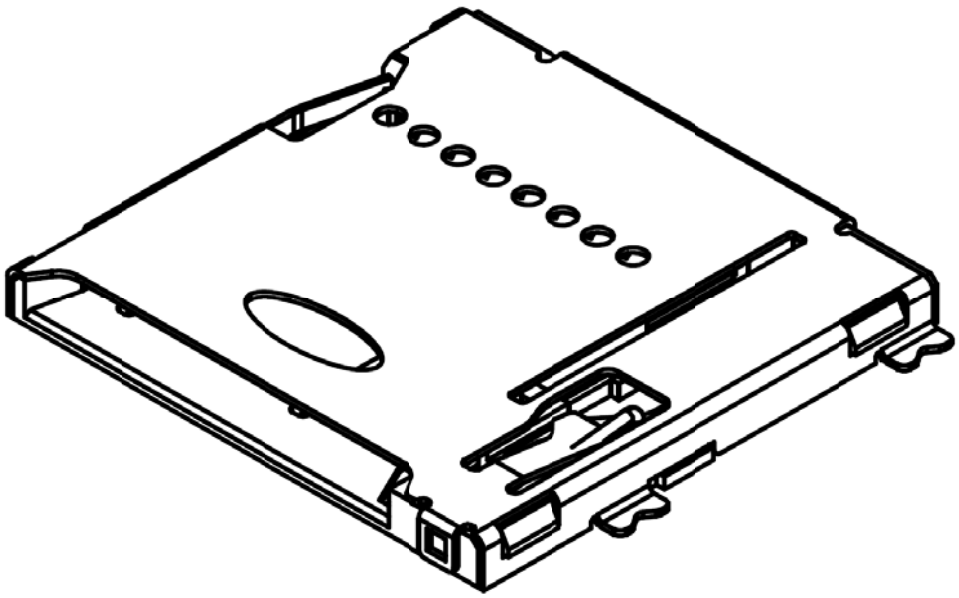


Note: All dimensions meet EIA-481-B requirements.

Part Number: MEM2075		Product Description: Micro SD Memory Card Connector,1.40mm Profile SMT, Push-Push, with Normally open Switch					
Drawing Date: 19th December 2017							
By	CC	Tolerances (Except as Noted) Length	Angle	Units: Metric (mm)	RoHS COMPLIANT 2011/65/EU Deca-BDE	This drawing is confidential and copyright of Global Connector Technology, Ltd (GCT). This drawing must not be copied or disclosed without written consent. E & OE	GCT www.gct.co
Detail	Drawing Release	X.X ±0.38 X.XX ±0.25 X.XXX ±0.100	±1°	3rd Angle Projection			Not to Scale / Drawn By CC / Sheet No. 2/2
Revision	A1						
Date	10/09/20						

PRODUCT SPECIFICATION

Part Number	MEM2075		**Rev**	A		**Date**	07/12/17
Product Description	Micro SD Memory Card Connector, 1.40mm Profile, SMT, Push-Push, with Normally Open Switch.					**Page**	1
Doc Number	MEM2075	**Prepared**	**CC**	**Checked**	**VJ**	**Approved**	**ST**



PRODUCT SPECIFICATION

Part Number	MEM2075		**Rev**	A		**Date**	07/12/17
Product Description	Micro SD Memory Card Connector, 1.40mm Profile, SMT, Push-Push, with Normally Open Switch.					**Page**	2
Doc Number	MEM2075	**Prepared**	**CC**	**Checked**	**VJ**	**Approved**	**ST**

1.0 SCOPE.

This specification covers performance, test and quality requirements for the Micro SD Memory Card Connector Normally open MEM 2075(Push-Push Type, SMT, 1.40mm Profile.).

2.0 PRODUCT NAME AND PART NUMBER.

Memory Card Connector, Push-Push Type: MEM2075.

3.0 PRODUCTSHAPE, DIMENSIONS AND MATERIAL.

Please refer to drawings.

4.0 RATINGS.

4.1 Current rating ……. 0.5A DC (per pin)

4.2 Voltage rating ……30 Volts AC(RMS)

4.3 Operating Temperature Range ……-25°C TO +85°C

5.0 TEST AND MEASUREMENT CONDITIONS.

Product is designed to meet electrical, mechanical and environmental performancerequirements specified in Paragraph 6.0. All tests are performed in ambient conditionsunless 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 and record contact resistance of mated connector using test current of 10mA max and 20 mV open circuit voltage in accordance withEIA-364-6B.	Less than 80 mΩ initial Less than 100 mΩ at end of test
Insulation Resistance	Apply 500Volts DC between adjacent contacts of mated connectors for one minute in accordance with EIA-364-21C	Greater than 1000 MΩ
Dielectric Strength	Mate connectors and apply 500 V AC for 1 minute between adjacent terminal ground, in accordance with EIA-364-20B.	No creeping discharge or flash over. Current leakage less than 1.0 mA

6.2 Mechanical Performance.

Item	Test Condition	Requirement
Card Retention Force	Pull the card at speed of 25mm/min.	Initial value 0.8N minimum.
Insertion/Ejection Force	Push the card at speed of 25+/-3mm/minute.	Lock Force: 10N (1.02 kgf) Max. Lock Release Force: 10N (1.02 kgf) Max.
Durability	The connector should be mated and unmated for 5000 cycles with 0.6mm travel at a rate of 25mm/min.	No evidence of physical damage. Contact Resistance ≦100mΩ at end of test .
Vibration	Subject mated connectors to 10 to 55 to 10 Hz frequency span over 1 minute at a 1.5mm amplitude. Test to be conducted on 3 mutually perpendicular planes for 15minutes eachwith 100mA appliedand in accordance with EIA-364-28D.	No electrical discontinuity greater than 1 μsec. shall occur. No damage to product. Contact Resistance ≦100mΩ at end of test .
Mechanical Shock	Subject the part to a 294m/s2 half sine wave acceleration for 11 ms. Three shocks to be applied in each of the X, Y and Z planes and in both directions. A total of 18 shocks. Apply DC 1 mA current during test in accordance with EIA-364-27B.	No electrical discontinuity greater than 1 μsec. shall occur. No damage to product. Contact Resistance ≦100mΩ at end of test .

6.3 Environmental Performance and Others.

Item	Test Condition	Requirement
Thermal Shock	Mate Connector and perform the following thermal cycle :- -55+/-3°C for 30 minutes. . +85+/-2°C for 30 minutes. Repeat for 5 cycles in accordance with EIA-364-32C.	No evidence of physical damage, discharge, flashes or corrosion in contact areas. Contact Resistance Less than 100mΩ at end of test. Insulation Resistance greater than 1000MΩ at end of test.
Humidity Test	Mate connector and expose to temperature of 40±2°C with 95% RH for 96 hours then place in ambient temperature for 1 to 2 hrs. In accordance with EIA-364-31 method III test condition A.	
Salt Water Spray	Subject mated connectors to 35±2°Cand 5±1% salt condition for 48hours. Test in accordance with EIA-364-26B.	
Temperature Life (High)	Subject product to 85±2°C for 96 hours continuously in accordance with MIL-STD-202, Method 108.	
Solderability	Dip solders tails into molten solder, held at a temperature of 245±5°C for 5±0.5 seconds, in accordance with EIA-364-52.	95% of immersed area must show no voids of pin holes.
Resistance to Reflow Soldering Heat.	Mount connector, place in reflow oven and expose to the temperature profile shown in fig 1.0	No evidence of physical damage or abnormalities adversely affecting performance.

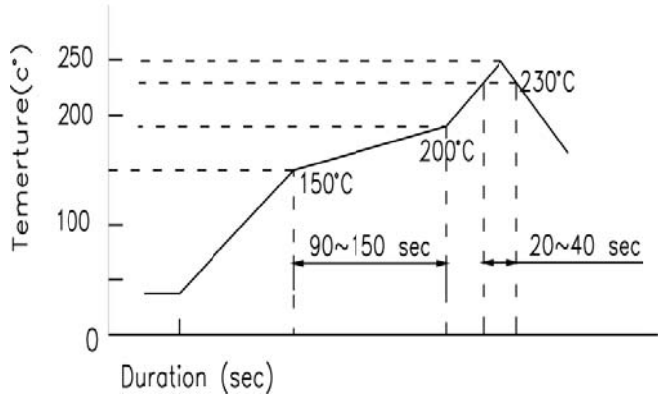


Fig.1. Recommended Reflow Temp. Profile

PRODUCT SPECIFICATION

Part Number	MEM2075			Rev		A	Date	07/12/17
Product Description	Micro SD Memory Card Connector, 1.40mm Profile, SMT, Push-Push, with Normally Open Switch.						Page	5
Doc Number	MEM2075	Prepared	CC	Checked	VJ		Approved	ST

7.0 PRODUCT QUALIFICATION AND TEST SEQUENCE

Test Item	Group						
	A	B	C	D	E	F	G
Examination of Product	1,7	1,10	1,10	1,5	1,5	1,3	1,3
Contact Resistance	3,6	2,7	2,7	2,4	2,4		
Insulation Resistance		3,8	3,8				
Dielectric Withstanding Voltage		4,9	4,9				
Mechanical shock		6					
Card Retention Force	2,5						
Insertion/Ejection Force	2,5						
Durability	4						
Vibration		5					
Humidity			6				
Salt Water Spray				3			
Temperature Life					3		
Thermal Shock			5				
Solderability						2	
Resistance to Reflow Soldering heat							2
Sample QTY.	5	5	5	5	5	5	5

PRODUCT SPECIFICATION

Part Number	MEM2075		**Rev**	A		**Date**	07/12/17
Product Description	Micro SD Memory Card Connector, 1.40mm Profile, SMT, Push-Push, with Normally Open Switch.					**Page**	6
Doc Number	MEM2075	**Prepared**	**CC**	**Checked**	**VJ**	**Approved**	**ST**

Revision details :-

Revision	Information	Page	Release Date
A	Specification released.	-	07/12/17
	.		