

# **Connector Datasheet**

## PT06M00003R1 MICROSIM TOP MOUNT PUSH PUSH TYPE H=1.34mm

Prepared: Hyde		Approved: ADAM		
Checked: FEIDI		Customer:		
Version	Changed Reason		Changed by	Date
01	Original version		Hyde	20191030
	$\lambda 0^{\gamma}$			
C				

Address (India): H-601, Officer City2, Rajnagar Extension, Ghaziabad

Address (TW): 2F., NO 3, Gongye 4th RD., Hukou Shiang Hsinchu County 303-51, Taiwan



## TECHNICAL INFORMATION

### MATERIALS

• Materials used in the construction of product shall be as specified on the applicable product drawing

## ELECTRICAL PERFORMANCE

Voltage Rating : 10V DC

Current Rating : 0.5Amps Max

Contact Resistance (signal) :  $100 \text{ m} \Omega$  Initial ( $140 \text{ m} \Omega$  After Test) Max.

Insulation Resistance : 500M  $\Omega$  Min. at 500VDC.

Dielectric Withstanding Voltage : 250VAC/Minute .

Operating Temperature : -25° C~+85° C

## MECHANICAL PERFORMANCE

- Card Insertion Force : Initial value:1.0Kg Max.
- Card Release Force : Initial value: 0.1Kgf Max.
- Contact Retention Force : Male: 300gf / pin Min.
- Durability : 5000 cycles

## PACKING

Reel packing



Examination of product drawing and Specification.Visual inspection No physical damageElectricalConnector contacts: Initial: 100mΩ max After test: 140mΩ max ResistanceMate dummy card, measure circuit, 20mV max,10mA max. (El4 23)Low Level Contact ResistanceConnector contacts: Initial: 500mΩ max After test: 540mΩ max After test: 540mΩ max After test: 540mΩ maxMate dummy card, measure circuit, 20mV max,10mA max. (El4 23)Insulation Resistance1000MΩ Min. at 500V DC / 2min.EIA-364-21-EDielectric Withstanding VoltageNo breakdown at 500V RMSEIA-364-20-EMECHANICAL5000 time Appearance: No damage contact. Resistance:150mΩMax.Insertion and extraction are repeated 7000 cycles with t actually card at the speed r actually card every 2000 cy	
Electrical       Connector contacts: Initial: 100mΩ max       Mate dummy card, measure circuit,         Low Level       After test: 140mΩ max       Mate dummy card, measure circuit,         Contact       R 40mΩ max       Detection switch contact         Resistance       Detection switch contact       20mV max,10mA max. (El4 23)         Insulation Resistance       1000MΩ Min. at 500V DC / 2min.       EIA-364-21-E         Dielectric Withstanding Voltage       No breakdown at 500V RMS       EIA-364-20-E         MECHANICAL       5000 time Appearance: No damage contact.Resistance:150mΩMax.       Insertion and extraction are repeated 7000 cycles with t actually card at the speed t 400~600 cycles/hour. Exch actually card every 2000 cycles	
Low Level Contact Contact ResistanceConnector contacts: Initial: 100mΩ max After test: 140mΩ max R 40mΩ max Detection switch contact Initial: 500mΩ max After test:540mΩ maxMate dummy card, measure circuit, 20mV max,10mA max, (EIA 23)Insulation Resistance1000MΩ Min. at 500V DC / 2min.EIA-364-21-EDielectric Withstanding VoltageNo breakdown at 500V RMSEIA-364-20-EMECHANICAL5000 time Appearance: No damage contact.Resistance:150mΩMax.Insertion and extraction are repeated 7000 cycles with t actually card at the speed r 400~600 cycles/hour. Exch actually card every 2000 cycles/hour.	
Low Level Contact ResistanceInitial: 100mΩ max After test: 140mΩ max R 40mΩ max Detection switch contact Initial: 500mΩ max After test:540mΩ maxMate dummy card, measure circuit, 20mV max,10mA max. (EIA 23)Insulation Resistance1000MΩ Min. at 500V DC / 2min.EIA-364-21-EDielectric Withstanding VoltageNo breakdown at 500V RMSEIA-364-20-EMECHANICAL5000 time Appearance: No damage contact.Resistance:150mΩMax.Insertion and extraction are repeated 7000 cycles with t actually card at the speed r 400~600 cycles/hour. Exch actually card every 2000 cw	
Low Level ContactAfter test: 140mΩ max R 40mΩ maxMate dummy card, measure circuit, 20mV max,10mA max. (EIA 23)ResistanceDetection switch contact Initial: 500mΩ max After test:540mΩ max20mV max,10mA max. (EIA 23)Insulation Resistance1000MΩ Min. at 500V DC / 2min.EIA-364-21-EDielectric Withstanding VoltageNo breakdown at 500V RMSEIA-364-20-EMECHANICAL5000 time Appearance: No damage contact.Resistance:150mΩMax.Insertion and extraction are repeated 7000 cycles with t actually card at the speed r 400~600 cycles/hour. Exch actually card every 2000 cycles	
Low LevelAfter test: Horniz maxContactR 40mΩ maxResistanceDetection switch contactInitial: 500mΩ maxAfter test: 540mΩ maxAfter test: 540mΩ maxInsulation Resistance1000MΩ Min. at 500V DC / 2min.Dielectric Withstanding VoltageNo breakdown at 500V RMSBielectric Withstanding VoltageNo breakdown at 500V RMSEIA-364-20-EMECHANICALDurabilityDurability	
Contact ResistanceR 40mΩ max Detection switch contact Initial: 500mΩ max After test:540mΩ max20mV max,10mA max. (EIA 23)Insulation Resistance1000MΩ Min. at 500V DC / 2min.EIA-364-21-EDielectric Withstanding VoltageNo breakdown at 500V RMSEIA-364-20-EMECHANICAL5000 time Appearance: No damage contact.Resistance:150mΩMax.Insertion and extraction are repeated 7000 cycles with t actually card at the speed r 400~600 cycles/hour. Exch actually card every 2000 cycles	364-
Resistance       Detection switch contact       23)         Initial: 500mΩ max       After test:540mΩ max         Insulation Resistance       1000MΩ Min. at 500V DC / 2min.       EIA-364-21-E         Dielectric Withstanding Voltage       No breakdown at 500V RMS       EIA-364-20-E         MECHANICAL       5000 time Appearance: No damage contact.Resistance:150mΩMax.       Insertion and extraction are repeated 7000 cycles with t actually card at the speed r 400~600 cycles/hour. Exch actually card every 2000 cycles	
Initial: 500mΩ max         After test: 540mΩ max         Insulation Resistance       1000MΩ Min. at 500V DC / 2min.         Dielectric Withstanding Voltage       No breakdown at 500V RMS         EIA-364-21-E         MECHANICAL         Durability         S000 time Appearance: No damage contact.Resistance:150mΩMax.         Insertion and extraction are repeated 7000 cycles with t actually card at the speed r 400~600 cycles/hour. Exch actually card every 2000 cycles	٢
Insulation Resistance       1000MΩ Min. at 500V DC / 2min.       EIA-364-21-E         Dielectric Withstanding Voltage       No breakdown at 500V RMS       EIA-364-20-E         MECHANICAL       5000 time Appearance: No damage contact.Resistance:150mΩMax.       Insertion and extraction are repeated 7000 cycles with t actually card at the speed r 400~600 cycles/hour. Exch actually card every 2000 cycles/hour.	
Insulation Resistance       2min.       EIA-364-21-E         Dielectric Withstanding Voltage       No breakdown at 500V RMS       EIA-364-20-E         MECHANICAL       5000 time       Insertion and extraction are repeated 7000 cycles with t actually card at the speed r 400~600 cycles/hour. Exch actually card every 2000 cycles	
Voltage       No breakdown at 500V RMS       EIA-304-20-E         MECHANICAL       5000 time       Insertion and extraction are repeated 7000 cycles with t actually card at the speed r 400~600 cycles/hour. Exch actually card every 2000 cycles/hour. Exch actually card every 2000 cycles	
5000 timeInsertion and extraction are repeated 7000 cycles with t actually card at the speed r actually card at the speed r 400~600 cycles/hour. Exch actually card every 2000 cycles	
Durability Durability Durability Contact.Resistance:150mΩMax. 400~600 cycles with t	
Durability Appearance: No damage actually card at the speed r contact.Resistance:150mΩMax. 400~600 cycles/hour. Exch	
contact.Resistance:150mΩMax. 400~600 cycles/hour. Exch	
lactually card every 2000 cv	ange the
Measuring by dummy card (EIA364-09)	cles
Card Insertion Force Initial value:1.0Kg Max. Speed 25±3mm/minute	
Card Release Force Initial value: 1.0Kgf Max. Speed 25±3mm/minute	
Vibration Mate dummy card and plac Mate dummy card and plac on the vibrator, then apply t following vibration. Then it s measured. In accordance w 364-28 Frequency :10Hz→ 10Hz.	he shall be rith EIA-
Direction : Three mutually perpendicular directions.	
Total amplitude : 1.50mm	
Sweep duration : 2 hours for direction, a total of 6 hours.	r each
Mate dummy card and plac on the vibrator, then apply t following vibration. Then it s	e them
Mechanical ShockAppearance: no damage. Discontinuity: 1 microsecondmeasured. In accordance w 364-28 Frequency :10Hz→ 10Hz	shall be vith EIA-
Appearance: no damage. Mechanical Shock Discontinuity: 1 microsecond 364-28 Frequency :10Hz→	shall be vith EIA-

#### -----



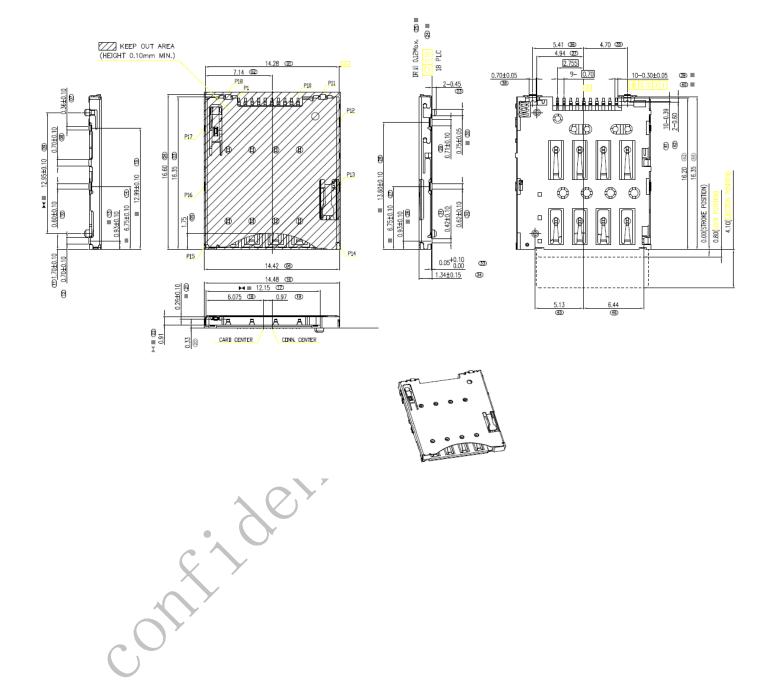
		Sweep duration : 2 hours for each direction, a total of 6 hours.
ENVIRONMENTAL		
Humidity	Meets requirements of product drawing and electrical specification.	EIA-364-31C method II Condition A
Salt spray	Meets requirements of product drawing and electrical specification.	Mate dummy card and expose them to the following environment in accordance with EIA-364-26. Temperature : $35 \pm 2^{\circ}$ Relative Humidity: $95 \sim 98\%$ RH Salt water density: $5+/-1\%$ (by weight) Duration : 24 hours
Low Temperature	Meets requirements of product drawing and electrical specification	The connector housing shall be store at temperature of -25 ± 3°C for 48hours
Dry heat	Meets requirements of product drawing and electrical specification	The connector housing shall be store at temperature of 85 ± 2°C for 96hours EIA-364-17C
Thermal Cycling	No abnormality	Cycle the connector between -15°C +/-3 °C and 85°C+/-3°C. Ramps should be 1 °C min. per minute, and dwell times should ensure the contacts reach the temperature extremes (5 minutes min.). Humidity is not controlled. Perform 100 such cycles. Follow EIA-364-110
PHYSICAL		
Solderability	The test area shall be covered more than 95% of immersed area with flash solder	Solder Temperature: 240 $^\circ$ C ± 5 $^\circ$ C Immersion Period: 3 ± 0.5sec.
Resistance to Soldering Heat	<ol> <li>Without deformation of case or excessive loosen.</li> <li>Electrical characteristics shall be satisfied</li> </ol>	Place the connector on the P.C. Board, then immerse the solder pin up to the surface of the board in the solder bath at $260^{\circ}C \pm 5^{\circ}C$ for 5 sec.(Included $245^{\circ}C \pm 5^{\circ}C$ for 10 sec.)

Figure 1

NOTE: Shall meet visual requirements, show no physical damages.

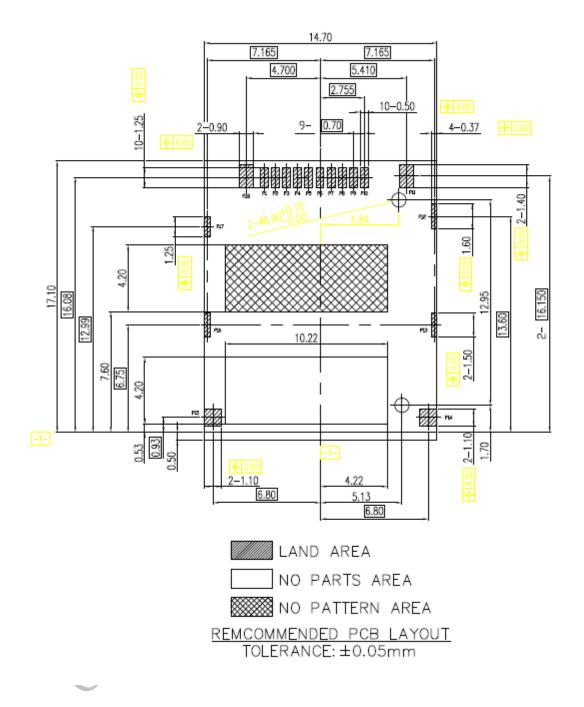


## **Component Configuration and Dimensions**



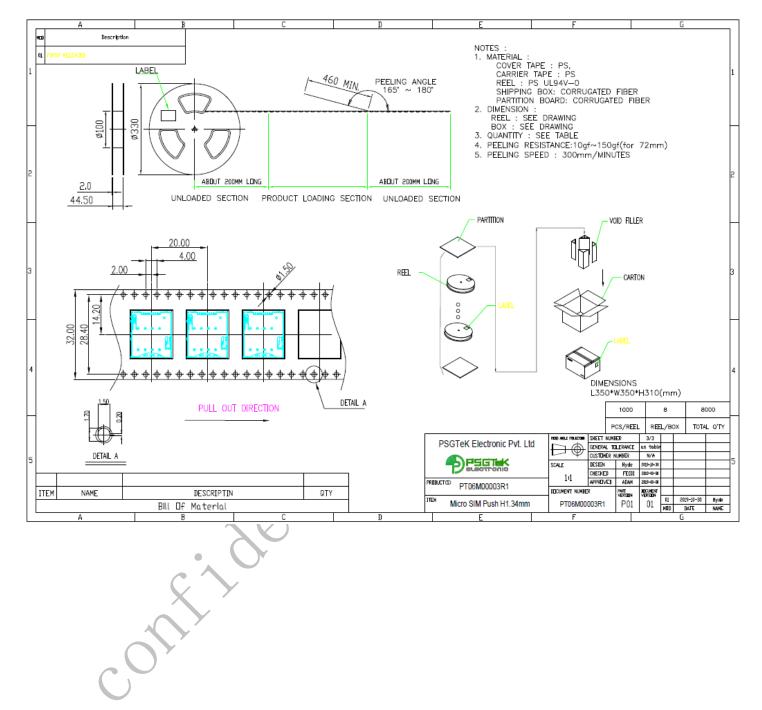


## Pins assignment for PCB Layout



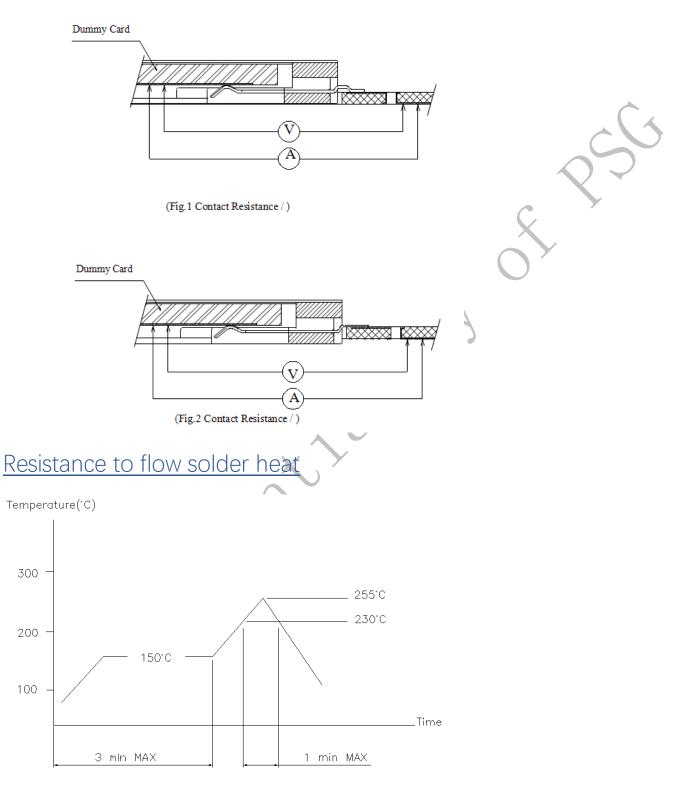


## Packing drawing





## Contact Resistance



Note: The product specification only for standard product