



JNPS-0826C

製品仕様書
Product Specification

3M 印
1.27mm ピッチ
フラットケーブル用コネクタ
2列 PCB コネクタ 78XX シリーズ
78XX-00XXPR

3M Brand
Connector for
1.27mm Pitch Flat Cable
2 Row PCB Connector 78XX Series
78XX-00XXPR

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SUMITOMO 3M LIMITED

ELECTRONIC SOLUTIONS DIVISION
TECHNICAL DEPARTMENT

1. FUNCTION

This connector is one of board mount connectors designed for IDC (Insulation Displacement Connector) connection with 1.27mm pitch flat cable. This connector has 2 rows of plural U-elements at top side and 2 rows of contact tails on 2.54mm×2.54mm (.1"×.1") grid at bottom side. Then, this connector has the function of electrical connection between cable and PC board.

2. COMPATIBLE OBJECTS

2-1 WIRE ACCOMODATION

28 AWG Stranded *corresponding with UL Style 2651

2-2 COMPATIBLE BOARD

Thickness: 1.6mm ± 0.2mm

Through hole diameter: ϕ 0.8mm ± 0.1mm, 2.54mm×2.54mm grid

* Refer to the drawing 4U-0010-0919-0.

3. RELATED SPECIFICATION DRAWINGS

See the drawings described in JNPD-0826.

4. RELATED TEST STANDARDS

MIL-STD-202

JEIDA-38-1984

JIS C 0050

JNTM-0039, JNTM-0040

*JNTM: Test Method Standard of Sumitomo 3M for Electronic and Electrical Component Parts.

5. APPLICATION

PRODUCT NUMBER INFORMATION

78 XX - 00 X X PR

PLATING SUFFIX

PR : U-ELEMENT AREA AND TAIL AREA / Gold Flash Plating

TAIL LENGTH

0 : 2.8mm

6 : 3.84mm

TAIL STYLE

0 : Standard (Straight)

CONTACT QUANTITY

XX : XX Pos.

PRODUCT SERIES NAME

78 : 2 Row PCB Connector

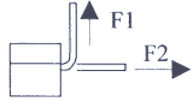
6. QUALITY PERFORMANCE

6-1 RATING

ITEM	RATING
CURRENT VOLTAGE TEMPERATURE	1.0A Max. AC: 250V Max. / DC: 300V Max. -55°C ~ 105°C

6-2 PHYSICAL SPECIFICATIONS

* The value in () is reference.

TEST DESCRIPTION	REQUIREMENT	TEST CONDITION	RELATED STANDARD
CONTACT RETENTION FORCE	1.96N (200gf) Min.	Tensile speed 5mm / min.	_____
CABLE RETENTION FORCE	Vertical Direction F1: 4.9N (0.5 kgf) Min. Horizontal Direction F2: 4.9N (0.5 kgf) Min.	Cable retention force is defined as the force at cable tripping from connector under the following two conditions. * Tensile speed 5mm / min. 	_____
VIBRATION	Electrical discontinuity: Less than 1 μ s	Sweep Freq.: 10~55Hz, Amplitude: 1.52mm(or 98 m/s ²), Sweep Cycle: 1min., Sweep time: 2 hours Sweep in each direction: (X,Y,Z)	MIL-STD-202F 101A
MECHANICAL SHOCK	Electrical discontinuity: Less than 1 μ s	490 m/s ² , 11ms, Half sine shock pulse. 3 times / X,Y,Z directions (Total 18 times)	MIL-STD-202E 213B
SOLDERABILITY	Wetting: 95% Min. or Zero cross time: 3 seconds Max.	Solder: Sn-3Ag-0.5Cu - Wetting Measurement: 245°C, 3 seconds - Wetting Balance Method: 245°C	JNTM-0039 JIS C 0050
SOLDERING HEAT RESISTANCE	Connector should not have any defect portions after test.	Dip soldering: 260°C, 10 seconds, 2 times or 263°C, 5 seconds, 2 times * without Pre-heating Soldering Iron: Dependence on soldering conditions. * It need the evaluation under actual conditions.	JNTM-0040

6-3 ELECTRICAL SPECIFICATIONS

TEST DESCRIPTION	REQUIREMENT	TEST CONDITION	RELATED STANDARD
DIELECTRIC WITHSTANDING VOLTAGE	No appearance of arcing and break down. Leak current: 1mA Max.	Impressed voltage is AC 1000V rms. between adjacent two contacts for one minute.	_____
INSULATION RESISTANCE	1000M Ω Min.	Impressed voltage is DC 500V between adjacent two contacts for one minute.	_____
CONTACT RESISTANCE	- Initial / 25 m Ω Max. - Change of contact resistance after environmental tests / 20 m Ω Max.	Contact resistance is measured at Short Circuit. Current: 1.5mA Open Circuit Voltage: 20mV by 4 terminal method. * Measurement values include the resistance of contact pins as conductive material. * Refer to Table 1 regarding the conditions of each environmental test.	See Table 1.

Table 1: ENVIRONMENTAL TEST

ITEM	TEST CONDITION	RELATED STANDARD
MOISTURE	-10 ~ 65°C, Relative Humidity 95% / 10 cycles	MIL-STD-202F106D
SALT SPRAY	NaCl 5% solution, 35°C / 48 hours	MIL-STD-202F101D
THERMAL SHOCK	-55°C→25°C→85°C→25°C / 5 cycles	MIL-STD-202F107G
HUMIDITY (STEADY STATE)	40°C, Relative Humidity 95% / 96 hours	MIL-STD-202F103B
THERMAL LIFE	Steady Current: Current Rating \times 110%, 85°C / 1000 hours	_____
H ₂ S GAS	3 \pm 1 ppm, 40°C, Relative Humidity 70 ~ 80% / 96 hours	JEIDA-38-1984

7. PLATING SPEC INDICATION ON CONNECTOR

The first letter, in stamped 3 letters on the connector body for lot numbering, identified the following plating specs.

N XX : PR plating

* XX : two alphabet letters

8. PACKAGE & IDENTIFICATION

These products are packed with plastic tray and carton box for transit.
Carton box are identified by part number, quantity, maker name and lot number.

9. STORAGE

This products shall be stored in a room, ambient temperature 5 ~ 35°C, and ambient humidity 40 ~ 70%.