



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  
Cnnector for  
1.27mm Pitch Flat Cable  
2 Row PCB Connector 78XX Serie  
78XX-00XXPR

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ELECTRONIC SOLUTIONS DIVISION  
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## 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

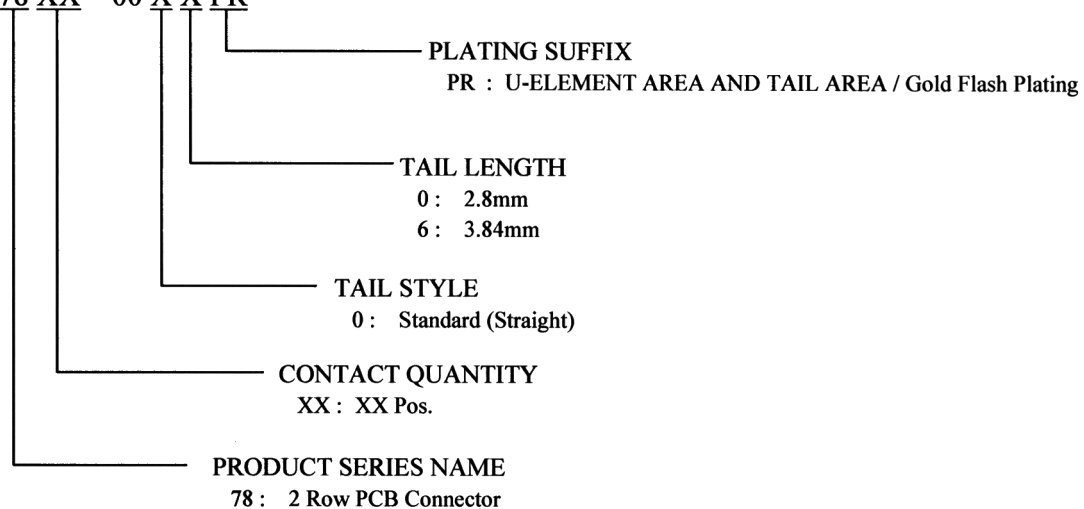
JNTM-0039, JNTM-0040

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

## 5. APPLICATION

### PRODUCT NUMBER INFORMATION

78 XX - 00 X X PR




## 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 1μs	Sweep Freq.: 10~55Hz, Amplitude: 1.52mm(or 98 m/s <sup>2</sup> ), Sweep Cycle: 1min., Sweep time: 2 hours Sweep in each direction: (X,Y,Z)	MIL-STD- 202F 101A
MECHANICAL SHOCK	Electrical discontinuity: Less than 1μs	490 m/s <sup>2</sup> , 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 $\Omega$ Min.	Impressed voltage is DC 500V between adjacent two contacts for one minute.	————
CONTACT RESISTANCE	- Initial / 25 m $\Omega$ Max. - Change of contact resistance after environmental tests / 20 m $\Omega$ 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 <sub>2</sub> 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%.