

Data Sheet

Fujitsu Narrow Pitch Stacking Connector FCN-280 Series

Fujitsu board-to-board narrow pitch stacking connector for use in measurement and factory automation control equipment

Overview

Fujitsu's FCN-280 board to board connector has a narrow pitch (0.8mm). The unique structure prevents insertion problems and it's easy lock structure provides tactile feedback when mated/unmated, an important consideration in industrial applications..

Features

- Terminal pitch 0.8mm
- 2.0mm effective mating length provides high connection reliability
- Stacking height 18mm
- Surface mount
- Fitting metals included to mount onto PCB
- Structure prevents misinsertion
- Easy lock structure with tactile feedback
- Tape added to interface with connector for vacuum pick and place



FCN-280 series connector

Item	Specification
Operating temperature range	-55°C to +85°C (includes temperature rise by current)
Max. current	0.5A
Max. voltage	100VAC
Contact resistance	45mΩ maximum (10mA, 20mVDC)
Insulation resistance	1,000MΩ minimum (100VDC)
Dielectric withstanding voltage	500VAC, 1 minute
Insertion force	30-pin: max. 28.0 N, 40-pin: max: 32.0 N, 60-pin: max: 40 N
Withdrawal force	30-pin: min. 2.0 N, 40-pin: min: 2.5 N, 60-pin: min: 3.5 N
Item	Material, Surface treatment
Insulation material	LCP resin, UL94 V-0
Conductor	Copper Alloy
Surface treatment	Contact: Gold plating (Pagos®) Terminal: Gold coat
Metal fitting	Copper alloy (tin plating)
Vacuum tape	Polyimide film / acrylic pressure sensitive adhesive

Ordering code

FCN-	28	8	M	030	G /	0	-T
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)

(a) Fujitsu Component connector

(b) 280 series connector

(c) Terminal 8: SMT

(d) Body: M: Plug

F: Socket

(e) Number of pins: 30, 40, 60

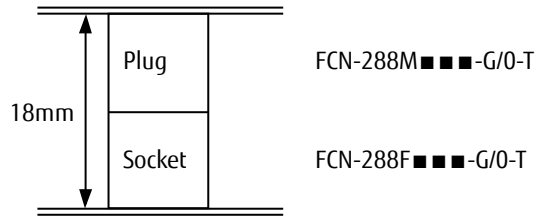
(f) G: Gold plating

(g) 0: Stacking height 18mm

(h) T: With vacuum tape

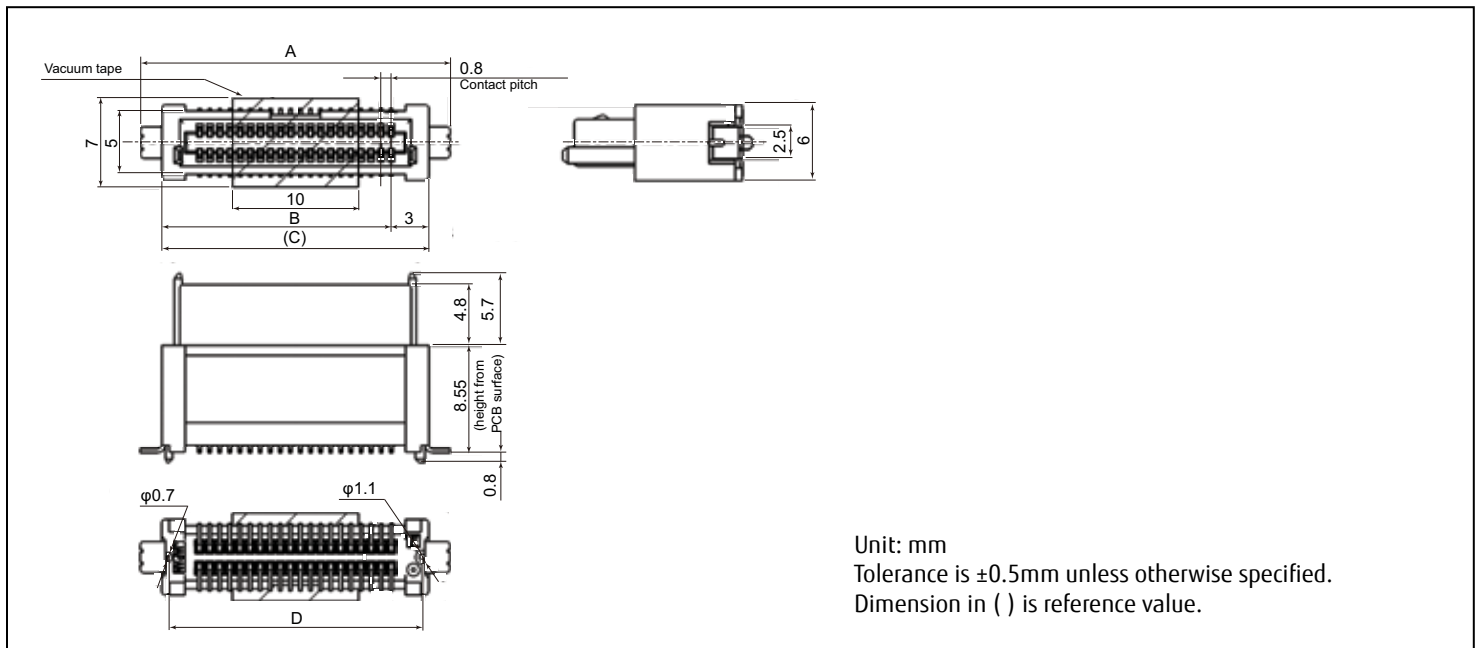
Board-to-board connection

Parallel PCB connection

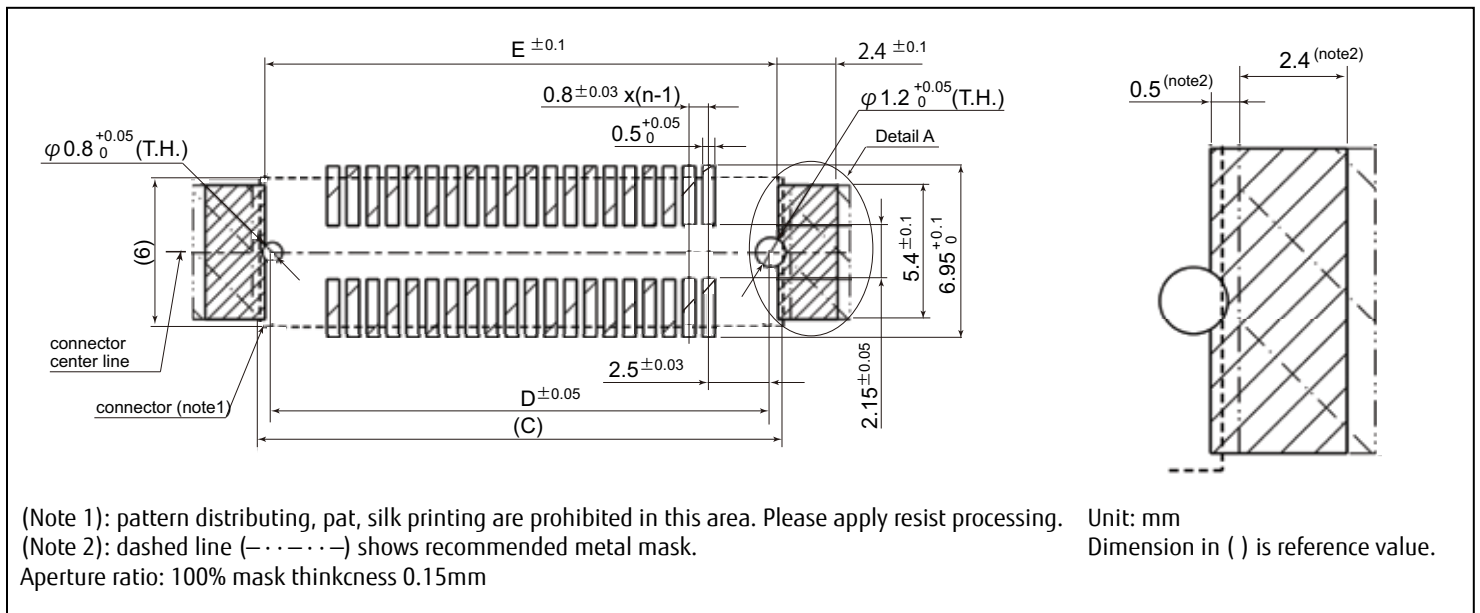


■ Socket

• Dimensions



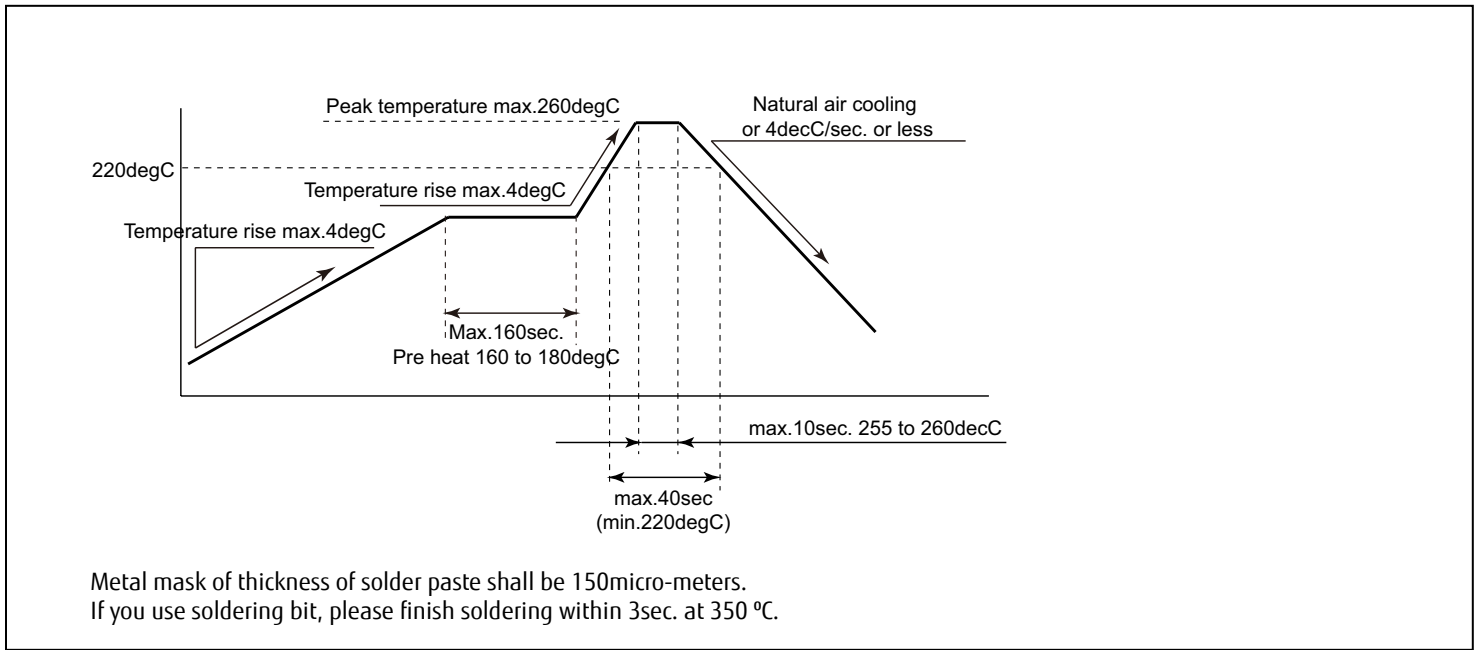
• Mounting hole layout



• Part numbers and dimensions

No. of pins	Part number	Dimensions (mm)					MOQ	
		n	A	B	(C)	D		
30	FCN-288F030-G/0-T	15	20.6	14.2	(17.2)	16.2	16.8	560
40	FCN-288F040-G/0-T	20	24.6	18.2	(21.2)	20.2	20.8	560
60	FCN-288F060-G/0-T	30	32.6	26.2	(29.2)	28.2	28.8	480

■ Recommended soldering conditions (reference)



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