



0.8mm Free Height Connectors

Quick Reference Guide

The popular 0.8mm FH connector system saves more than 50% board space compared to conventional 1.27mm centerline connectors. Its product portfolio includes board stacking heights ranging from 5mm through 20mm in increments of 1mm. It is also available in multiple sizes ranging from 40 to 200 positions. In addition, right angle plugs are available which mate to standard receptacles.

Our engineers are at the forefront of developing next generation technology to meet the needs of current and future high-speed data communications and telecommunications applications. Our next generation of 0.8mm free height connectors do just that by achieving unrivaled speeds of 32 Gbps+ while being capable of 56 Gbps PAM-4 and PCIe Gen 5 for future system upgrades.

Features

- Packaging options include tube, tube with pickup cap, or tape and reel with pickup cap
- Polarized housings for proper mating orientation
- Locating posts for proper positioning
- 8u" and 30u" Gold plating options
- Right angle plugs in 60 and 80 positions

Benefits

- Strong signal integrity support
- Broad stacking portfolio
- Reputation for excellent quality and customer support

Applications

- Parallel board stacking applications in high-end computer, telecommunications, industrial, and military/aero industries
- Test cards and card extenders
- Communications equipment
- Electronic equipment requiring miniature connector packaging

te.com/products/FH-connector

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0.8mm Free Height Features

<p>Positioning bosses are standard for correct board placement and orientation</p>	<p>Optional pickup caps are available for automatic pick and place equipment</p>	<p>Housings are polarized for proper mating orientation</p>

Stack Height Combinations	5H plug	6H plug	7H plug	8H plug
5H receptacle	5mm	6mm	7mm	8mm
9H receptacle	9mm	10mm	11mm	12mm
13H receptacle	13mm	14mm	15mm	16mm
17H receptacle	17mm	18mm	19mm	20mm

For specific part numbers of sizes 40-200 positions, in 20 position increments, see part selection chart.

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Receptacle Part Numbers

Height	Plating Au Thickness	Package Type	Pickup Cap	40 Pos.	60 Pos.	80 Pos.	100 Pos.	120 Pos.	140 Pos.	160 Pos.	180 Pos.	200 Pos.
5H	Flash	T&R	Y	9-5177985-1	9-5177985-2	9-5177985-3	9-5177985-4	9-5177985-5	-	9-5177985-8	-	-
	8u"	Tube	N	5177983-1	5177983-2	5177983-3	5177983-4	5177983-5	5177983-6	5177983-8	5177983-9	1-5177983-0
		Tube	Y	-	-	-	5179229-4	5179229-5	-	5179229-8	5179229-9	1-5179229-0
		T&R	Y	5177985-1	5177985-2	5177985-3	5177985-4	5177985-5	5177985-6	5177985-8	5177985-9	1-5177985-0
	30u"	Tube	N	6123000-1	6123000-2	6123000-3	6123000-4	6123000-5	6123000-6	6123000-8	6123000-9	1-6123000-0
T&R		Y	5353999-1	-	5353999-3	5353999-4	5353999-5	5353999-6	5353999-8	5353999-9	1-5353999-0	
9H	Flash	T&R	Y	9-5179180-1	9-5179180-2	9-5179180-3	9-5179180-4	-	-	-	-	-
	8u"	Tube	N	5-5179009-1	5-5179009-2	5-5179009-3	5-5179009-4	5-5179009-5	5-5179009-6	5-5179009-8	5-5179009-9	6-5179009-0
		Tube	Y	-	-	-	5-5179232-4	5-5179232-5	-	-	5-5179232-9	6-5179232-0
		T&R	Y	5-5179180-1	5-5179180-2	5-5179180-3	5-5179180-4	5-5179180-5	5-5179180-6	-	-	-
	30u"	Tube	N	5084613-1	5084613-2	5084613-3	5084613-4	5084613-5	5084613-6	5084613-8	5084613-9	1-5084613-0
T&R		Y	7-5179180-1	7-5179180-2	7-5179180-3	7-5179180-4	7-5179180-5	7-5179180-6	-	-	-	
13H	Flash	T&R	Y	-	-	-	9-5084616-4	9-5084616-5	-	-	-	-
	8u"	Tube	N	5-5179010-1	5-5179010-2	5-5179010-3	5-5179010-4	5-5179010-5	5-5179010-6	5-5179010-8	5-5179010-9	6-6123212-0
		Tube	Y	5-5179233-1	-	-	5-5179233-4	-	5-5179233-6	-	5-5179233-9	6-5179233-0
		T&R	Y	5084616-1	5084616-2	5084616-3	5084616-4	5084616-5	5084616-6	5084616-8	5084616-9	1-5084616-0
	30u"	Tube	N	5-6123212-1	5-6123212-2	5-6123212-3	5-6123212-4	5-6123212-5	5-6123212-6	5-6123212-8	5-6123212-9	6-6123212-0
T&R		Y	5084618-1	5084618-2	5084618-3	5084618-4	5084618-5	5084618-6	5084618-8	5084618-9	-	
17H	Flash	T&R	Y	3-1735482-1	3-1735482-2	3-1735482-3	3-1735482-4	3-1735482-5	3-1735482-6	3-1735482-8	3-1735482-9	4-1735482-0
	8u"	Tube	N	5-1735480-1	5-1735480-2	5-1735480-3	5-1735480-4	5-1735480-5	5-1735480-6	5-1735480-8	5-1735480-9	6-1735480-0
		Tube	Y	1735481-1	1735481-2	1735481-3	1735481-4	1735481-5	1735481-6	1735481-8	1735481-9	1-1735481-0
		T&R	N	1735482-1	1735482-2	1735482-3	1735482-4	1735482-5	1735482-6	1735482-8	1735482-9	1-1735482-0
	30u"	Tube	N	7-1735480-1	7-1735480-2	7-1735480-3	7-1735480-4	7-1735480-5	7-1735480-6	7-1735480-8	7-1735480-9	8-1735480-0
Tube		Y	2-1735481-1	2-1735481-2	2-1735481-3	2-1735481-4	2-1735481-5	2-1735481-6	2-1735481-8	2-1735481-9	3-1735481-0	
		T&R	Y	2-1735482-1	2-1735482-2	2-1735482-3	2-1735482-4	2-1735482-5	2-1735482-6	2-1735482-8	2-1735482-9	3-1735482-0

New Next-Gen .8mm Receptacle Part Numbers

Height	Plating AU Thickness	Package Type	Pickup Cap	50 Pos.
6H	8u"	T&R	Yes	2-2316373-1
	30u"	T&R	Yes	2316373-1

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Plug Part Numbers

Height	Plating Au Thickness	Package Type	Cap	40 Pos.	60 Pos.	80 Pos.	100 Pos.	120 Pos.	140 Pos.	160 Pos.	180 Pos.	200 Pos.	
5H	Flash	T&R	Y	2327234-1	2327234-2	2327234-3	2327234-4	2327234-5	-	2327234-8	-	-	
		Tube	N	5177984-1	5177984-2	5177984-3	5177984-4	5177984-5	5177984-6	5177984-8	5177984-9	1-5177984-0	
		T&R	Y	5177986-1	5177986-2	5177986-3	5177986-4	5177986-5	5177986-6	5177986-8	-	-	
	8u"	Tube	N	-	-	5179230-3	5179230-4	5179230-5	-	-	5179230-8	-	1-5179230-0
		T&R	Y	5177986-1	5177986-2	5177986-3	5177986-4	5177986-5	5177986-6	5177986-8	-	-	
		T&R	Y	5177986-1	5177986-2	5177986-3	5177986-4	5177986-5	5177986-6	5177986-8	-	-	
6H	Flash	T&R	Y	1-2327234-1	1-2324234-2	-	-	-	-	-	-	-	
		Tube	N	5179029-1	5179029-2	5179029-3	5179029-4	5179029-5	5179029-6	5179029-8	5179029-9	1-5179029-0	
		T&R	Y	1-5177986-1	1-5177986-2	1-5177986-3	1-5177986-4	1-5177986-5	1-5177986-6	-	-	-	
	8u"	Tube	N	-	-	2-5179230-3	2-5179230-4	-	-	2-5179230-8	2-5179230-9	3-5179230-0	
		T&R	Y	1-5177986-1	1-5177986-2	1-5177986-3	1-5177986-4	1-5177986-5	1-5177986-6	-	-	-	
		T&R	Y	1-5177986-1	1-5177986-2	1-5177986-3	1-5177986-4	1-5177986-5	1-5177986-6	-	-	-	
7H	Flash	T&R	Y	2-2327234-1	-	-	-	2-2327234-5	-	-	-	-	
		Tube	N	5179030-1	5179030-2	5179030-3	5179030-4	5179030-5	5179030-6	5179030-8	5179030-9	1-5179030-0	
		T&R	Y	2-5177986-1	2-5177986-2	2-5177986-3	2-5177986-4	2-5177986-5	2-5177986-6	2-5177986-8	2-5177986-9	3-5177986-0	
	8u"	Tube	N	-	-	-	-	4-5179230-5	4-5179230-6	-	4-5179230-9	5-5179230-0	
		T&R	Y	2-5177986-1	2-5177986-2	2-5177986-3	2-5177986-4	2-5177986-5	2-5177986-6	2-5177986-8	2-5177986-9	3-5177986-0	
		T&R	Y	2-5177986-1	2-5177986-2	2-5177986-3	2-5177986-4	2-5177986-5	2-5177986-6	2-5177986-8	2-5177986-9	3-5177986-0	
8H	Flash	T&R	Y	3-2327234-1	3-2327234-2	3-2327234-3	3-2327234-4	3-2327234-5	-	-	-	-	
		Tube	N	5179031-1	5179031-2	5179031-3	5179031-4	5179031-5	5179031-6	5179031-8	5179031-9	1-5173091-0	
		T&R	Y	3-5177986-1	3-5177986-2	3-5177986-3	3-5177986-4	3-5177986-5	3-5177986-6	3-5177986-8	3-5177986-9	4-5177986-0	
	8u"	Tube	N	-	-	-	6-5179230-4	6-5179230-5	6-5179230-6	-	6-5179230-9	7-5179230-0	
		T&R	Y	3-5177986-1	3-5177986-2	3-5177986-3	3-5177986-4	3-5177986-5	3-5177986-6	3-5177986-8	3-5177986-9	4-5177986-0	
		T&R	Y	3-5177986-1	3-5177986-2	3-5177986-3	3-5177986-4	3-5177986-5	3-5177986-6	3-5177986-8	3-5177986-9	4-5177986-0	
RA	Flash	T&R	Y	3-2327234-1	3-2327234-2	3-2327234-3	3-2327234-4	3-2327234-5	-	-	-	-	
		Tube	N	5179031-1	5179031-2	5179031-3	5179031-4	5179031-5	5179031-6	5179031-8	5179031-9	1-5173091-0	
		T&R	Y	3-5177986-1	3-5177986-2	3-5177986-3	3-5177986-4	3-5177986-5	3-5177986-6	3-5177986-8	3-5177986-9	4-5177986-0	
	8u"	Tube	N	6123002-1	6123002-2	6123002-3	6123002-4	6123002-5	6123002-6	6123002-8	6123002-9	1-6123002-0	
		T&R	Y	6123001-1	6123001-2	6123001-3	6123001-4	6123001-5	6123001-6	6123001-8	6123001-9	1-6123001-0	
		T&R	Y	6123001-1	6123001-2	6123001-3	6123001-4	6123001-5	6123001-6	6123001-8	6123001-9	1-6123001-0	

New Next-Gen .8mm Plug Part Numbers

Height	Plating AU Thickness	Package Type	Pickup Cap	50 Pos.
7H	8u"	T&R	Yes	2-2316375-1
	30u"	T&R	Yes	2316375-1

Stack Height = [(Rcpt. H + Plug H) -5]

example: [(13H Rcpt. + 6H Plug) -5] = [(13 + 6) -5] = 14mm stack height

T&R = Tape & Reel

Note: Part numbers are RoHS compliant

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Resources:

Product Specification

108-1228

Application Specification

114-40029

Instruction Sheet

408-9427