

Standard Edge II Card Edge Connectors

Product Facts

- Maximum numberof dual positions.100 [2.54] Centerlines-70,.125 [3.18] Centerlines-50,.150 [3.81] Centerlines-31
- Selective gold plating of contacts for high performance at low cost
- .025 [0.64] square solid posts meet standard wraptype specifications
- For flow solder applications
- Glass-filled polyester housing is 94V-0 rated
- Accepts double sided PC boards, .054-.070 [1.27-1.78] thick
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards
 Association, File No. LR 7189



Contact Rating* — 3 Amps continuous (UL and CSA)

Contact Resistance — 10 milliohms max

Operating Temperature — -55°C to $+85^{\circ}\text{C}$

Voltage Rating (Sea Level) -

.100 [2.54] centerline — 1000 VAC (test) .125 [3.18] centerline — 1500 VAC (test) .150 [3.81] centerline — 1500 VAC (test)

Insulation Resistance -

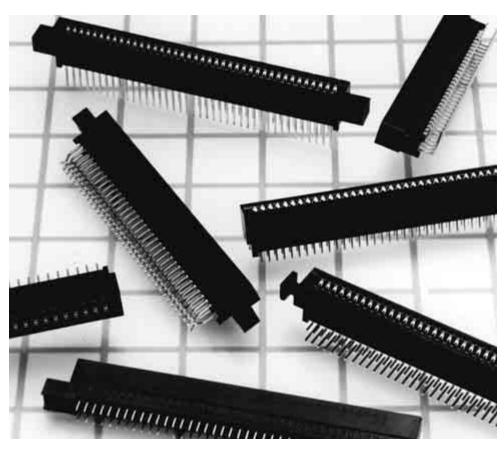
5000 megohms min., after exposure to humidity

Vibration Tolerance — 10 to 500 Hz

Contact Engagement Force — 12 oz [3.3 N] average per pair with .062 [1.57] PC board

Contact Separation Force — 2 oz [0.6 N] average per pair with .062 [1.57] PC board

Humidity Tolerance — 90%-95% for 96 hours



Tyco Electronics Standard Edge II Connectors provide high reliability and economy in packages compatible with industry standards for double sided printed circuit boards.

Tyco Electronics offers Standard Edge II Connectors with or without mounting ears, for rack mounting and soldering. Contacts are arranged on .100 [2.54] centers, .125 [3.18] centers, .150 [3.81] centers, .200 [5.08] row-to-row; and .250 [6.35] row-to-row. Right-angle connectors are also available with contacts arranged on .100 [2.54] centers, .150 [3.81] row-to-row or .200 [5.08] row-to-row.

Card extenders with contacts on .100 [2.54] and .125 [3.18] centers also are available.

Precision formed phosphor bronze contacts are selectively gold plated. Phosphor bronze has excellent strength characteristics which help the connector absorb load deflection movement of a PC board while maintaining sufficient contact force for good electrical connection. Bifurcated cantilever beam contacts provide redundant contact.

*Consult Tyco Electronics engineering when paralleling contacts for power applications.

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Standard Edge II Card Edge Connectors (Continued)

.100 [2.54] Centerline, Vertical Solder Posts, Without Mounting Ears

Material and Finish

Housing — Black glass-filled polyester, 94V-0 rated

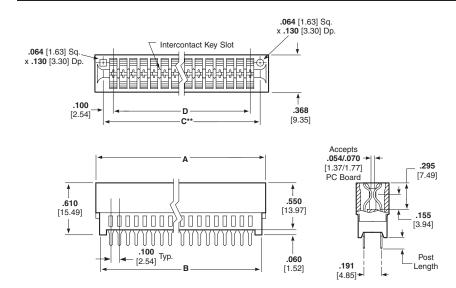
Contacts — Phosphor bronze, duplex plated as follows:

Plating — .000030 [0.00076] gold in contact area, tin on posts, with entire contact nickel underplated

Technical Documents

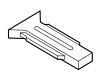
Product Specification

Qualification Test Report 501-227



Intercontact Keying Plug Material

Natural color polyester



Part Number 650025-2 (.100 [2.54] Centerline)

No. of		Dimer	nsions	Post	Part Numbers***		
Dual Positions	Α	В	C**	D	Length*	Solder Tail	
6	.860 21.84	.750 19.05	.700 17.78	.500 12.70	.125 3.18	7-5530843-5	
10	1.260 32.00	1.150 29.21	1.100 27.94	.900 22.86	.125 3.18	5-5530843-0	
12	1.460 37.08	1.350 34.29	1.300 33.02	1.100 27.94	.125 3.18	8-5530843-3	
15	1.760 44.70	1.650 41.91	1.600 40.64	1.400 35.56	.125 3.18	5530843-2	
17	1.960 49.78	1.850 46.99	1.800 45.72	1.600 40.64	.125 3.18	5-5530843-3	
18	2.060 52.32	1.950 49.53	1.900 48.26	1.700 43.18	.125 3.18	5530843-3	
20	2.260 57.40	2.150 54.61	2.100 53.34	1.900 48.26	.125 3.18	5-5530843-4	
22	2.640 62.48	2.350 59.69	2.300 58.42	2.100 53.34	.125 3.18	5530843-4	
25	2.760 70.10	2.650 67.31	2.600 66.04	2.400 60.96	.125 3.18	5530843-5	
28	3.060 77.72	2.950 74.93	2.900 73.66	2.700 68.58	.125 3.18	5530843-6	
30	3.260 82.80	3.150 80.01	3.100 78.74	2.900 73.66	.125 and .187 3.18 and 1.75	5530843-7	
31	3.360 85.34	3.250 82.55	3.200 81.28	3.000 76.20	.125 3.18	6-5530843-5	
35	3.760 95.50	3.650 92.71	3.600 91.44	3.400 86.36	.125 3.18	2-5530843-3	
36	3.860 98.04	3.750 95.25	3.700 93.98	3.500 88.90	.125 3.18	5530843-8	
40	4.260 108.20	4.150 105.41	4.100 104.14	3.900 99.06	.187 3.18	2-5530843-0	
50	5.260 133.60	5.150 130.81	5.100 129.54	4.900 124.46	.187 3.18	2-5530843-2	

^{*}Contact Tyco Electronics for alternate post length.

Note: All part numbers are RoHS compliant.

^{**}C dimension is card slot length.

^{***}Press-fit parts can be made available, consult Tyco Electronics.

Notes: 1. Other connector sizes can be made available, consult Tyco Electronics.

2. High temperature IR reflow compatible connectors can be made available, consult Tyco Electronics.



Standard Edge II Card Edge Connectors (Continued)

.100 [2.54] Right-Angle Solder Posts, with Low and No Mounting Ears

Material and Finish

Housing — Black glass-filled polyester, 94V-0 rated

Contacts — Phosphor bronze, duplex plated as follows:

Plating A — .000030 [0.00076] gold in contact area, tin on posts, with entire contact nickel underplated

Plating B — .000015 [0.00038] gold in contact area, tin on posts, with entire contact nickel underplated

Related Product Data

Performance Specifications page 185

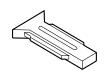
Technical Documents

Product Specification

108-9039

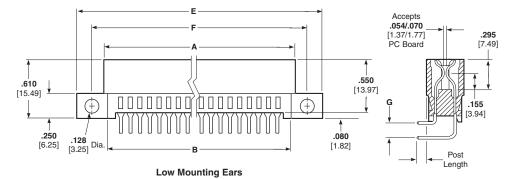
Intercontact Keying Plug Material

Natural color polyester



Part Number 650025-2 (.100 [2.54] Centerline)

Accepts .064 [1.63] Sq. .064 [1.63] Sq. x .130 [3.30] Dp. x .130 [3.30] Dp. Intercontact Key Slot [1.37/1.77] PC Board .295 .155 [3.94] .300 .368 .100 [2.54] [7.62] [9.35] .100 Post Length With Board Locks



Low Mounting Ears

No. of Dual Positions				Post	Part Numbers				
	Α	В	C*	D	E	F	G1	Length ²	(Plating A)
12	1.460 37.08	1.350 34.29	1.300 33.02	1.100 27.94	2.045 51.94	1.775 45.08	.100x .150	.090	5145089-13
18	2.060 52.32	1.950 49.53	1.900 48.26	1.700 43.18	2.645 67.18	2.375 60.32	.100x .150	.090	5645384-1
20	2.260 57.40	2.150 54.61	2.100 53.34	1.900 48.26	2.845 72.30	2.575 65.40	.100x .150	.090	5645384-3

^{*}C dimension is card slot length.

Note: Other connector sizes can be made available, consult Tyco Electronics.

No Mounting Ears

No. of Dual Positions	Dimensions					Post	Part Numbers	
	Α	В	C*	D	G1	Length ²	Plating A	Plating B
10	1.260 32.00	1.150 29.21	1.100 27.94	0.900 22.96	.100x .150	.090	5650118-2	_
15	1.760 44.70	1.650 41.91	1.600 40.64	1.400 35.56	.100x .150	.090	5650118-1	_
19	2.160 54.86	2.750 69.85	2.700 68.58	1.800 45.72	.100x .150	.090	_	5532600-6
25	2.760 70.10	2.350 67.61	2.600 66.04	2.400 60.96	.100x .150	.090	_	5532600-2
31	3.360 85.34	3.250 82.55	3.200 81.28	3.000 76.20	.100x .150	.090	_	5532600-4
32	3.460 87.88	3.350 85.09	3.300 83.82	3.100 78.74	.100x .150	.090	_	5532600-5

^{*}C dimension is card slot length.

Other connector sizes can be made available, consult Tyco Electronics.
 High temperature IR reflow compatible connectors can be made available, consult Tyco Electronics.

Note: All part numbers are RoHS compliant.

¹ Metric equivalent for .100 x .150 and .100 x .200 are [2.54 x 3.81] and [2.54 x 5.08].

² Metric equivalent for post length is .090 = [2.27].

³ Connector with Board Locks.

¹ Metric equivalent for .100 x .150 and .100 x .200 are [2.54 x 3.81] and [2.54 x 5.08].

² Metric equivalent for post length is .090 = [2.27].