EDGECARD Connectors

PCB board to board connectors with 0,1" / 2.54mm pitch





MANUFACTURERS OF HIGH QUALITY CONNECTORS AND CONNECTOR ACCESSORIES

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EDGECARD CONNECTORS

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EDGECARD CONNECTORS

MAIN FEATURES

- 2,54mm (0,1") pitch
- Suitable for 1,4mm to 1,7mm thick printed circuit boards
 - Fixed or replaceable contacts
 - Cantilever or bifurcated contacts
 - Cut to any size from 4 to 170 contacts double sided
 - Suitable for vapour phase soldering
- Solder for discrete wire, straight p.c. and wire wrapping terminations
 - Plastic and metal end feet
 - Plastic and metal polarising keys

TECHNICAL DATA

MATERIALS				
Insulator	Glass filled polyester rated UL94 V-O			
Contact	Copper alloy plated hard acid gold			
Termination	Solder			

MECHANICAL				
Mechanical operations	100 ('Q' finish) 250 ('N' finish)			
Insertion and withdrawal force (per contact pair)	2.2 N max 0.2 N min			
Contact holding force	0.15 N min			
Operating temperature	-55°C to +125°C			

ELECTRICAL					
Current – Individual contacts (in isolation)	At 25°C Tamb. 4.5A max. At 85°C Tamb. 3A max.				
Current – All contacts (simultaneously)	At 25°C Tamb. 4A max. At 85°C Tamb. 2.5A max.				
Working Voltage	350V dc or ac peak				
Proof Voltage	1050V dc or ac peak				
Contact Resistance (initially)	10mΩ max				
Contact Resistance (after conditioning)	15mΩ max				
Insulation Resistance (initially)	1000MΩ min				
Insulation Resistance (after conditioning)	100MΩ min				



EDGECARD CONNECTORS **ORDERING INFORMATION**





CONTACT TYPES

CANTILEVER CONTACTS





BIFURCATED CONTACTS



EDGECARD CONNECTORS ORDERING CODES – VIKING / WEALD COMPARISON



CONTACT TYPE

VIKING: Fixed bifurcated contacts only

WEALD: C - Cantilever B - Bifurcated

CONTACT TERMINATION TYPE / ASSEMBLY STYLE

VIKING	WEALD				
D	54694 - Metal Fixing, Double Sided				
D	54696 - Plastic Fixing, Double Sided				
-	54688 - Metal Fixing, Double Sided				
I.	54690 - Plastic Fixing, Double Sided				
10/	54684 - Metal Fixing, Single Sided				
vv	54686 - Plastic Fixing, Single Sided				

CONTACT ROWS

- VIKING: 2 Double Sided 3 - Single Sided
- WEALD: Omitted Single Sided D - Double Sided

NO. OF CONTACT PAIRS / CONTACTS

VIKING: 005 - 100

WEALD: 5 to 85

MOUNTING TYPE

VIKING	WEALD*
А	31152-507-0
В	31152-508-0
С	31152-104-0
N (No Bracket)	1 <u>-</u> 1

* - WEALD End Fixings are available separately

POLARISING KEY POSITION

VIKING: 001 - 100

WEALD: In place of contact position 1 to 85 Intercontact position 1-2 to 84-85

POLARISING KEY TYPE

- VIKING: P In-contact 1.55 Nylon key (Black)
 - T In-contact 0.737 Nylon key (White)
 - B Between contact Nylon key (Red)
 - N No polarising key

WEALD:

KEY TYPE	A min	в
EA	0.89	7.9
DA/KA	1.65	7.9
MA	0.89	9.4
LA	0.92	7.9
CA	1.6	7.9

CONTACT FINISH

VIKING: 01 - Gold 0.25 microns thick

- 05 Gold 0.75 microns thick on engagement area, 0.25 microns thick on remainder
- 07 Tin 6.35 microns thick
- 09 Gold 0.25 microns thick on engagement area, Tin 5 microns thick on remainder
- 23 Gold 0.75 microns thick on engagement area, Tin 5 microns thick on remainder

All plating over Nickel

- WEALD L 0.8 microns Gold over 3.8 microns Nickel
 - N 5 microns Gold over Copper
 - Q 0.5 microns Gold over 3.8 microns Nickel
 - Y 0.5 microns Gold with 5 microns Gold local (engagement area)

MODIFICATION CODE (VIKING only)

VIKING: 800 - Identification Label Fitted

INSULATOR MATERIAL (VIKING only)

VIKING: B - Glass filled polyester. Colour - black



EDGECARD CONNECTORS ASSEMBLY STYLES









EDGECARD CONNECTORS ASSEMBLY STYLES



Table 4 FIXED CONTACTS, BIFURCATED INVERTED BELLOWS "B"									
TERMINATION STYLE	WIRE WRAPPING		SOLDER LUG		STRAIGHT P.C.				
ASSEMBLY STYLE	Double Sided	Single Sided	Double Sided	Single Sided	Double Sided	Single Sided	Double Sided	Single Sided	
METAL FIXINGS	54684	54685 54684 (table 4)	54680	54681 54680 (table 4)	54688	54689 54688 (table 4)	54694	54695 54694 (table 4)	Replaceable - 10.29 max - Fixed
PLASTIC FIXINGS	54686	54687 54686 (table 4)	54682	54683 54682 (table 4)	54690	54691 54690 (table 4)	54696	54697 54696 (table 4)	Contact Contact
Y	14.6		4	.4	6	.3	3	.7	8.00
W MAX.	0.90				0.75		0.65		4.90
SECTION XX	0.38 x 0.76			0.38 x 0.57		0.38 x 0.46			
Z	1	14.1 4.6		.6	3	.1			
Part no. obsolete			2.83 Y	Y	Z	Y Y		5.08 Section X - X	

Special extender board terminations available.Image: Comparison of the second seco

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EDGECARD CONNECTORS DIMENSIONS



CONSTANT DIMENSIONS	END FIXING PART NO.	DIMENSION 'F'
A = 0,97 Moulding length using metal fixings	31152-104-0	6,35
B = 0,71 Board length (max.)		
C = 15,19 Fixing centres with metal fixings	31152-507-0	7.98
D = 6,05 Moulding length using plastic fixings		
E = 18,75 Fixing centres with plastic fixings	31152-508-0	7.98



EDGECARD CONNECTORS





EDGECARD CONNECTORS PRODUCT SAFETY INFORMATION

These notes are intended to be used in conjunction with the Product Catalogue and Product Specification. Products may be safely used in the applications for which they have been designed and within the specified rating and environments. If products are exposed to conditions outside the performance ratings or specified environments they may constitute a hazard. In particular it should be noted that:-

1. Material Content

Edgecard Connectors generally use plastic and metal parts made of glass filled polyester, nylon and copper alloys.

2. Electric Shock, Burns and Fire

Hazard can occur if the product is used outside the specified parameters or if the product is damaged, wrongly wired or poorly assembled, or poorly integrated into larger equipments, or contaminated with conductive fluids. Live circuit terminations must be protected and live circuits never broken by disconnecting products.

Hot spots may be created when resistance is increased due to damage or incorrect integration particularly soldering, or loose terminations. Overheating can cause breakdown of insulation, electric shock, burns or, ultimately, fire. In the event of fire noxious and/or toxic fumes may be released and, in these circumstances, any fire involving the product should be dealt with by personnel properly equipped. Connectors with exposed terminations or contacts should not be used on the current supply side of a circuit with exposed contacts on an unmated product. Before making a circuit live, the product and wiring should be checked to ensure there is no electrically conducting debris present. Circuit resistance checks should also be conducted before making the circuit live. Always ensure that connectors are assembled and wired by properly trained personnel.

3. Use, Transport and Storage of Products

Care must be exercised to avoid damage to any part of the products during transporting, storage or use. Abnormal transit or storage conditions and abuse during installation can give rise to damage. Products should not be used in a damaged condition.

Improper storage (particularly of damaged products) can give rise to additional hazards particularly corrosion.

4. Disposal of Products

Product should not be burnt.

SAFETY RULES

- 1. FOLLOW THE GUIDELINES GIVEN.
- 2. ALWAYS PROTECT LIVE CIRCUITS AND NEVER DISCONNECT A LIVE CONNECTOR.
- 3. NEVER USE A DAMAGED CONNECTOR.
- 4. NEVER BURN DISCARDED CONNECTORS.