

The HB Series of discrete sizes of printed circuit connectors have mouldings with two rows of contact cavities. The same moulding is used for both single and double sided versions. For single sided printed circuit boards one row is assembled with nickel silver backing contacts which do not have an electrical function but maintain even pressure on the printed circuit board thus ensuring good electrical contact on the connecting edge of the printed circuit board to the gold finished conductive contacts assembled in the opposite row.

The single sided versions of HB are the Series HBS.

For double sided printed circuit boards both rows of the HB moulding are assembled with gold finished conductive contacts.

The double sided versions of HB are the Series HBD.

The HB Series of printed circuit connectors are available 10, 12, 15, 18, 22 and 43 contacts as HBS for single sided

P.C.B.'s and as HBD for double sided P.C.B.'s with 2 rows of 10, 12, 15, 18, 22 and 43 contacts.

The HB Series gives the designer a choice of 3 styles of contact termination, wire wrap, solder eyelet and dip solder.

All these contacts are manufactured from high quality phosphor bronze. The contact is bifurcated to assure a precise contact interface with the P.C.B. and two plating alternatives are offered; either bright nickel covered by hard gold plating or 0.0002" gold (5.08µM) which is recommended for severe industrial atmosphere environments.

A feature of the HB contacts is that should they become damaged for any reason, they can be easily replaced individually thereby prolonging the connector life.

HB printed circuit connectors can be polarised in the contact cavity in place of contacts or between contact cavities without losing a pair of contacts.

Technical Specification

ELECTRICAL SPECIFICATION

Current rating	5 amps per contact at 25°C.
Working voltage	750V d.c. or a.c. peak at sea level
Voltage proof	2500V d.c. or a.c. peak at sea level
Contact resistance initial	Less than 5 milliohms
Contact resistance after 500 insertions and withdrawals	Less than 10 milliohms
Insulation resistance	Greater than 10 ⁵ megohms

MATERIALS SPECIFICATION

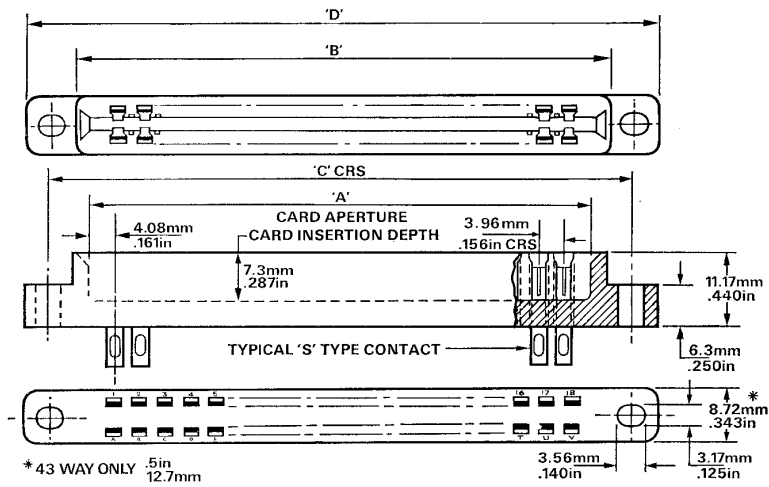
Moulding	Glass-filled Diallyl Phthalate Colour Green
Contacts	Type W, S and D. Phosphor bronze. Backing contact Nickel silver
Plating	Standard 0.000012 ins. (0.30µM) gold average over 0.0001 ins. (2.54µM) nickel, also 0.0002 ins. (5.08µM) gold

MECHANICAL SPECIFICATION

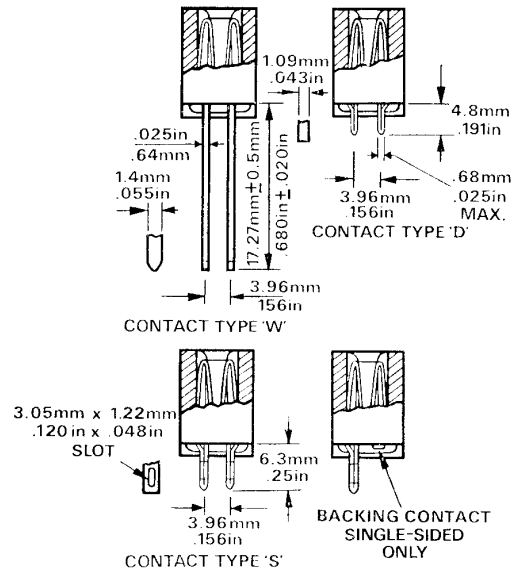
Contact pitch	0.156 ins. (3.96 mm)
Working temperature	-55°C to +110°C
Insertion force	Less than 16 oz (453 gm)
Printed Circuit Board Thickness	0.054 ins. to 0.071 ins. (1.37 mm to 1.80 mm)
Polarisation	In contact cavity or between contact cavity. (See "Recommended Board cut out for Polarising Keys" opposite.)



OUTLINE DIMENSIONS

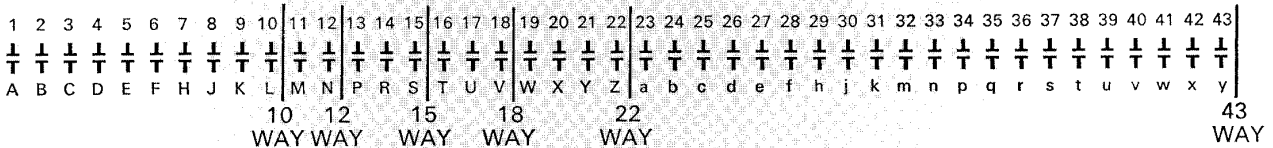


TERMINATION DETAIL



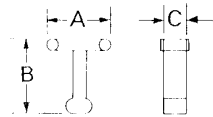
NO. OF PINS		DIMENSIONS							
HBS	HBD	A		B		C		D	
		in.	mm	in.	mm	in.	mm	in.	mm
10	10/10	1.724	43.78	1.870	47.50	2.156	54.76	2.468	62.88
12	12/12	2.036	51.70	2.185	55.49	2.468	62.68	2.783	70.68
15	15/15	2.504	63.60	2.656	67.46	2.938	74.62	3.254	82.65
18	18/18	2.972	75.48	3.125	79.37	3.406	86.50	3.723	94.53
22	22/22	3.596	91.33	3.750	95.25	4.032	102.51	4.348	110.43
43	43/43	6.875	174.60	7.000	177.80	7.302	185.47	7.618	193.50

Contact Identification of HB Printed Circuit Connectors



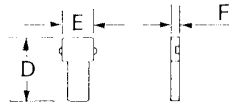
POLARISING KEYS

In contact:
Part number 101-516
Supplied in bags of 100



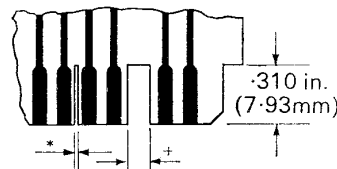
A = .235 in. (5.97mm)
B = .297 in. (7.53mm)
C = .080 in. (2.03mm)

Between contact:
Part number 101-517
Supplied in bags of 100



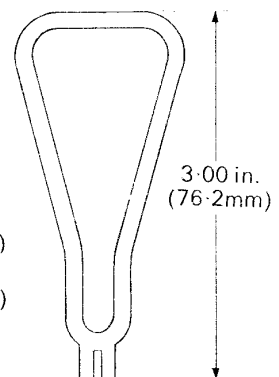
D = .265 in. (6.73mm)
E = .108 in. (2.74mm)
F = .028 in. (0.71mm)

RECOMMENDED BOARD CUTOUT FOR POLARISING KEYS



- + Cut Out PCB .091 in. (2.31mm) for Polarising Key 101-516
- * Cut Out PCB .040 in. (1.01mm) for Polarising Key 101-517

POLARISING KEY TOOLS

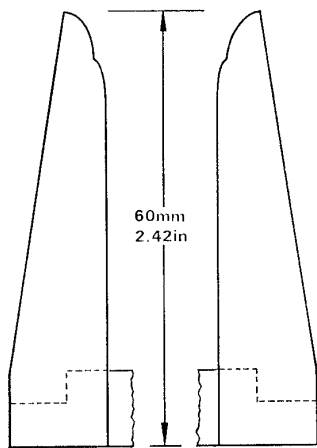


Insertion Tool for 101-516 Part number 101-520

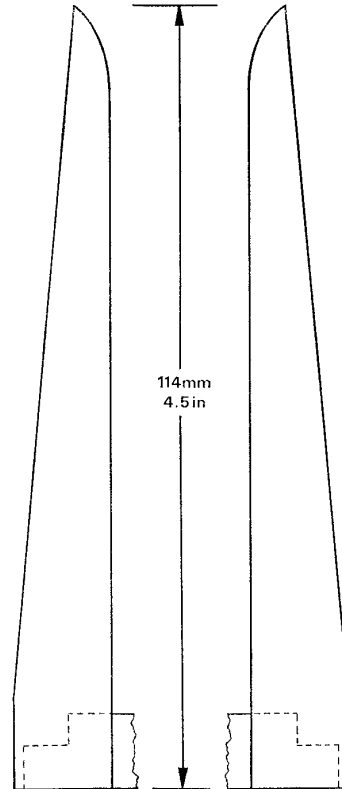
Insertion Tool for 101-517 Part number 101-521

Guides for HB Printed circuit connectors

These plastic guides are designed to ensure positive alignment between printed circuit connectors and printed circuit boards; to prevent accidental disconnection due to vibration or physical shock; and to give overall support to printed circuit boards. They are supplied in pairs.

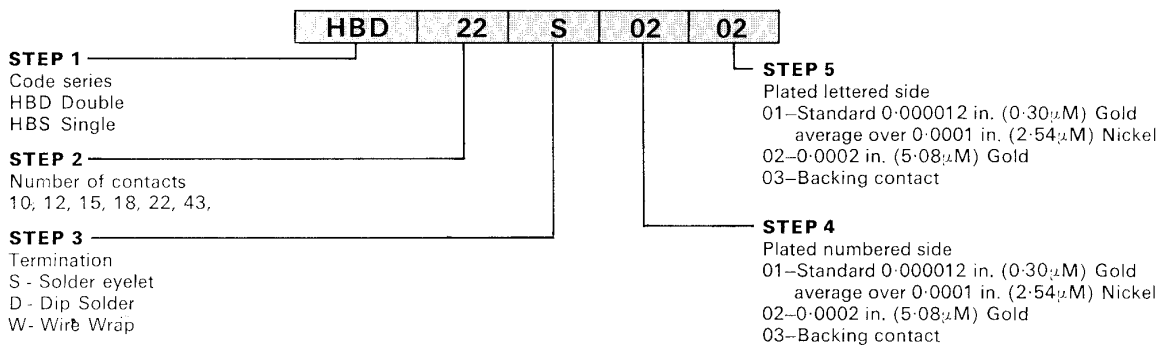


For use with series HB printed circuit connectors and recommended printed circuit boards. Part Number 101-558 (Supplied in pairs).



For use with series HB printed circuit connectors and recommended printed circuit boards. Part Number 101-561 (Supplied in pairs).

ORDERING INFORMATION



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