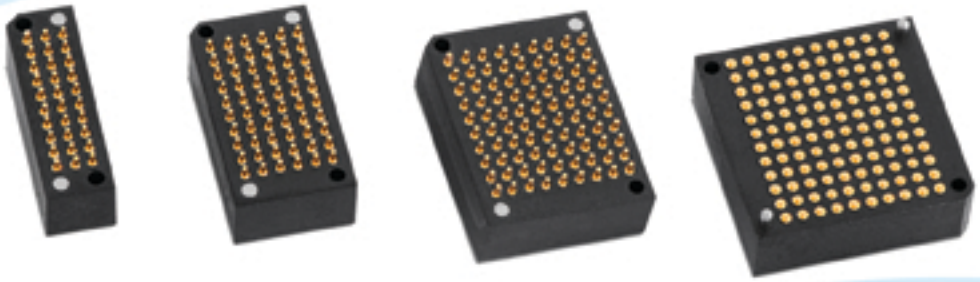
smiths connectors

MLPI SERIES

The Micro Miniature Low Profile Interposer Series is designed for demanding applications where space and height are limited but high performance is essential. Available in different spring loaded contact positions and allowing for customisations, the connector fully supports mixed signal operation for DC, RF and Digital signal transmission.



STANDARD AND CUSTOM FEATURES

Available in 30, 60, 90 and 120 positions with 1 mm pitch as standard and with 4 mm and 6 mm board to board height options, the MLPI high density connectors offer a space saving solution that does not require any mating counterpart. Different pitches (i.e. 2.54 mm), pin counts, shapes and materials are available on request.

MULTIPLE APPLICATIONS

For DC operation each pin provides support for 3 Amps. Extended corner ground pins allow for an optional first mate last break (FMLB). RF signals can be supported with a 3 x 3 pin field, offering coaxial connector levels of loss, VSWR and screening in a 50 Ohm transmission line.
High speed differential pairs are also supported for digital interconnect.

EASY CONNECTION

Designed with a surface mount termination on one side, the interposers allow an array of signals on one pcb to be connected to another by simply bringing the two pcbs together and compressing the spring contacts. The mating pcbs only have gold plated pad terminations aligned to the interposer to make the connection, therefore simplifying the design and construction as well as minimising the assembly costs of the system.

LONG LIFE CYCLE AND HIGH RELIABILITY

More than 2000 mating cycles according to EIA 364.09.
Resistant to shock and vibration, salt spray and humidity according to EIA 364.

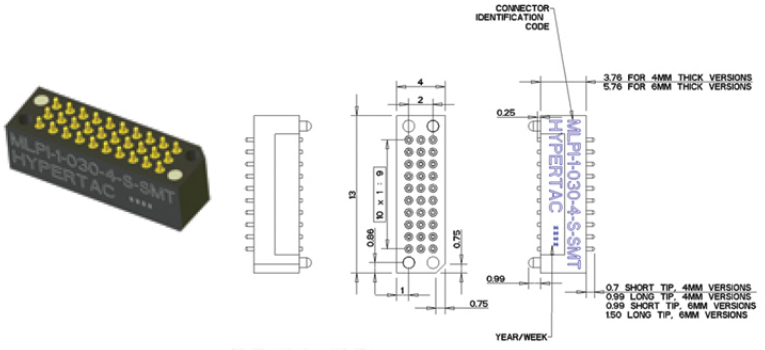
HYPERTAC iDi INTERCONNECT DEVICES SABRITEC

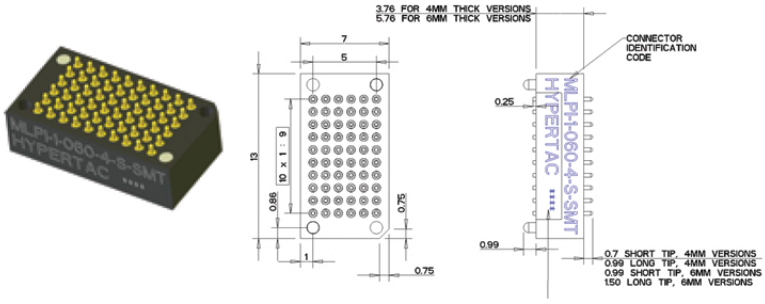
TECHNICAL CHARACTERISTICS

Contact number	30, 60, 90, 120 (stacking height 4 and 6 mm)
Contact pitch	1 mm square grid pitch
Contact material	Plunger & Barrel: Brass, gold plated - Spring: Stainless Steel, gold plated
Contact current rating	3A @ 25°C for each contact according to IEC 512-3
Contact resistance	< 50 mΩ (typical) for each contact according to EIA 364.6
Insulation resistance	5000 MΩ @ 500 Vdc according to EIA 364.21
Mating force	< 70 grams for each contact
Connector life	> 2000 mating cycles according to EIA 364.09
Insulator material	Glass reinforced Liquid Crystal Polymer type GLCP-30F or PPS Type GST-40F

30 and 60 ways

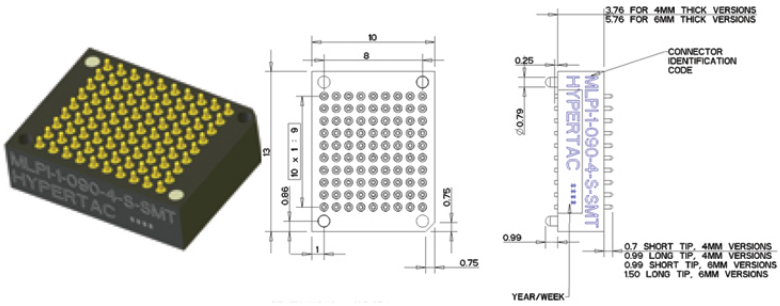
4mm or 6mm thick interposer connectors

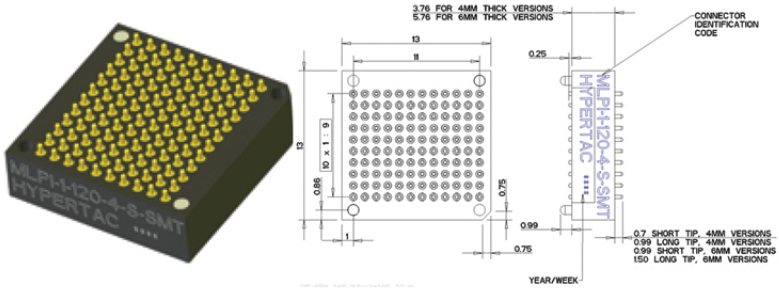




90 and 120 ways

4mm or 6mm thick interposer connectors





SPRING LOADED CONTACTS

Contact	Full Stroke	Force at preload	Force at full stroke
4 mm short	0.028 in [0.71 mm]	1.0 oz [30 grams]	2.1 oz [62 grams]
4 mm long	0.039 in [0.99 mm]	0.4 oz [11.8 grams]	2.1 oz [62 grams]
6 mm short	0.039 in [0.99 mm]	1.0 oz [30 grams]	2.1 oz [62 grams]
6 mm long	0.059 in [1.5 mm]	0.4 oz [11.8 grams]	2.1 oz [62 grams]

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FOR MORE INFORMATION | smithsconnectors.com |

Hypertac S.p.A. Via P.D. Da Bissone 7A 16153 Genova Italy T: +39 01060361 F: +39 0106505748 info@hypertac.it www.hypertac.com