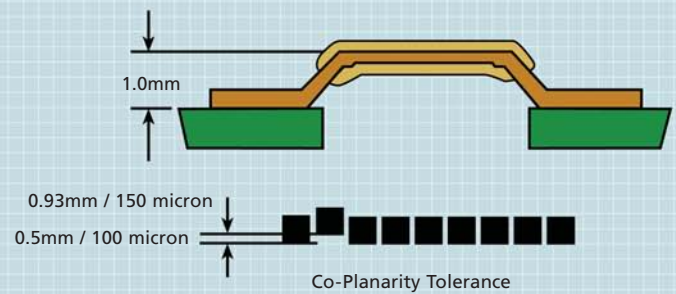
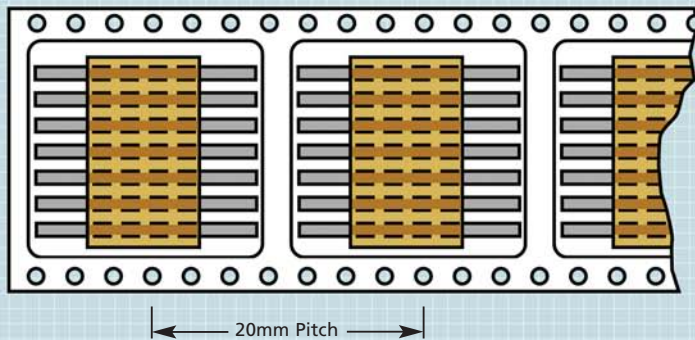


Surface Mount Interconnects (SMIs)

For board to board interconnection



General Description

Surface mount interconnects (SMIs) developed by Teknoflex are the worlds first fully machine placeable interconnection component.

These products which are supplied in standard 13 inch (330mm) diameter reels of 1500 circuits are available with 4 to 22 conductors on a 0.93mm pitch and with 10 to 40 conductors on a 0.50mm pitch.

Extensive development by Teknoflex has enabled the company to achieve a level of co-planarity which allows the SMI to be accurately placed by all industry standard "pick & place" machines.

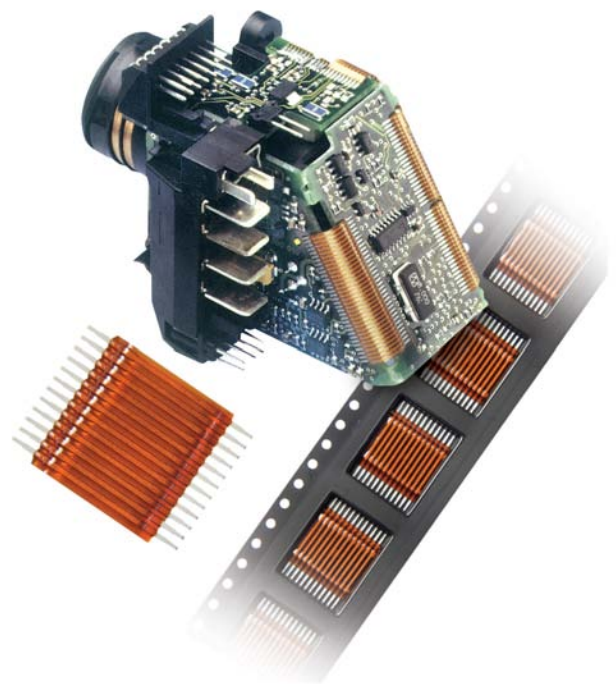
The SMIs are assembled directly into solder paste in the same way and during the same process cycle as all other components are placed. The solder joints are made during the reflow process again utilizing industry standard equipment.

It is an ideal low cost product for board to board interconnection. The constructions and materials have been specifically selected to provide the most reliable and cost effective solution.

Applications

The SMI technology has been successfully employed in many applications including high volume automotive, medical, computer, power supplies, sensors and optical equipment.

Please contact our Sales Team for further information.



Surface Mount Interconnects (SMIs)

For board to board interconnection

Benefits

- Low cost component
- Low cost assembly
- Eliminates connectors
- Supplied in tape and reel format (Waffle trays-special order)
- Fully auto-placeable
- Conventional solder reflow
- Physically robust
- Flexible
- Light weight
- Low profile
- Excellent current carrying capability
- Excellent in "bend to install" applications
- Excellent vibration resistance in all axis

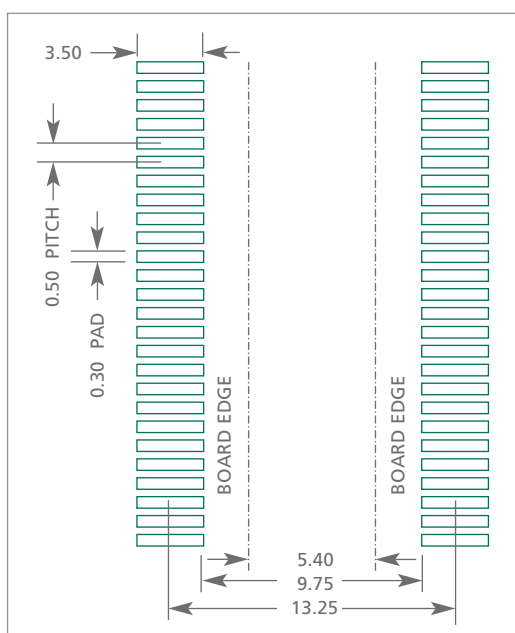
Specification

Conductor pitch 0.50mm pitch 0.93mm pitch	0.50mm and 0.93mm 10 to 40 conductors (as standard) 4 to 22 conductors (as standard)
Standard size	Conductor Length - 15mm Width-Varies according to number of conductors Maximum height 1mm
Copper thickness (exposed finger area)	250 micron \pm 10%
Copper thickness (bend area)	70 micron - 125 micron
Co-planarity of exposed fingers	150 micron (total) 0.93mm pitch 100 micron (total) 0.50mm pitch
Insulation thickness	25 micron \pm 10%
Dielectric material	Polyimide (standard)
Temperature range	Assembly 150°C to 250°C typical SMT reflow Operation -60°C to +125°C cyclic, +105°C continuous
Current rating (per conductor)	0.50mm pitch 1.0A for 10°C rise above ambient 0.93mm pitch 1.5A for 10°C rise above ambient
Flexural performance	180° bend = > 100+ cycles 2mm bend radius
Land finish	RoHS standard. Other finishes e.g. tin / lead available upon request

Custom designs available if required

Typical footprint details for the rigid PCB for 0.5mm pitch SMI

All dimensions are millimetres



ORDERING CODE

SMI - 0.93 - 22 - 11 - KFT(RoHS)

SURFACE MOUNT INTERCONNECT

ROHS COMPLIANT ELECTROLYTIC MATT TIN. OTHER FINISHES BY REQUEST

REQUIRED PITCH (IN MILLIMETRES)

INSULATION LENGTH (IN MILLIMETRES)

NUMBER OF CONDUCTORS