eries Elastomeric Matrix Connectors

Excellent for **Land Grid Arrays** and similar type interconnects. Extremely accurate silicone rubber electronic connectors with anisotropic conductive properties. A range of 300 to 2,000 fine metal wires per 1 cm² are embedded in the thickness direction of the transparent silicone rubber sheet. The fine metal conductors are gold-plated to ensure low resistance and the ability to withstand a relatively high current flow.

High density and greatly increased number of I/O's are possible; especially beyond 200 connections. Eliminates the costs of soldering and related rework. Facilitates denser and less expensive packaging.

After inserting the correctly sized connector pad between the opposing groups of electrodes, all that is necessary is to apply the appropriate pressure to allow the electrodes to be properly connected.

function:

APPLICATIONS:

- Ball Grid Arrays
- Tape Carrier Packs
- Quad Flat Packs
- Integrated Circuits
- Leadless Chip Carriers
- Printed Circuit Board

35X magnification side view exhibits compression of fine metal conductors





TYPICAL CHARACTERISTICS:

		Thick				
Measure	Unit	0.5	1.0	Remarks		
Continuity Resistance	Ω∙mm²	0.25	0.45	± 30%		
Current Density	mA/mm²	5	00	N/A		
Resistance Between Adjacent Conductors	Ω	10 ¹⁰ or more		C pattern p = 0.35		
Light Transmission	%	90		1.0 mm thick L pattern $p = 1.0$		
Operating Temperature	°C	-20 to	o +100	N/A		

W Series	Pitch (P)	Pattern Side View	Pattern Plan View	Thicknesses	Applied Electrode Gaps	Suitable E Width -	lectrodes Length	Maximum Length	Dimensions Width	Applications
WSL 1.	1.0	· · · · · · · · · · · · · · · · · · ·	<u>-</u> P	0.50mm	over 0.4	over 0.3	over 1.5	76.0mm	5.0mm	Combination type
	1.0			1.00mm	over 0.5	over 0.5	over 1.5			
wsc o	0.05	0.35	* * * * P * * * * - P * * * *	o 0.50mm	* (over 0.6) over 0.6	(over 0.7) over 0.9	(over 0.9) over 0.9	50.0mm	50.0mm	Matrix type electrode
	0.35			1.00mm	(over 0.7) over 0.7	(over 0.7) over 0.9	(over 0.9) over 0.9			
WBC	0.35		* * * * P * * * * * - P * * * *	0.50mm	(over 0.6) over 0.6	(over 0.7) over 0.9	(over 0.9) over 0.9	50.0mm	50.0mm	Matrix type electrode
				1.00mm	(over 0.7) over 0.7	(over 0.7) over 0.9	(over 0.9) over 0.9			

Notes: (1) The **WSL** and **WSC** types have straight metal conductors protruding slightly from both top and bottom of the silicone rubber sheet to ensure perfect connections with slight pressure. Designed for mounting applications.

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(2) The **WBC** type has curved fine metal conductors embedded in a silicone rubber sheet which are flush with the top and bottom planes. The curved configuration facilitates repeated compressions. Ideal for inspection applications.

* The upper: 12.5mm x 12.5mm product

The lower: 25mm x25mm, 37.5mm x 37.5mm or 50mm x 50mm product |

Part Number Nomenclature:



WSC-035-5.0 x 20.0 x 0.5



Thickness (mm) Length (mm) Width (mm) Pitch • 035 = 0.35 Conductor Pattern • C pattern Type • WS: Fine metal wire straight • WB:Fine metal wire curved