

The MOBO® series 9158 is a one-piece connector used to connect two PCBs within mobile phones, pagers, PDAs, security, handheld scanners, etc. in a cost-effective manner.

A standard range is available with 16, 20, 24 and 28 contacts to suit stack heights of 1.90mm to 3.30mm. Other contact variants are also available up to 5.10mm, in custom housings. The SOLO STACKER can allow a spacing tolerance of up to ± 0.30 mm and still provide reliable connections between the PCBs, even if they are not parallel.

SOLO STACKER is designed for PCB surface mounting and is supplied in tape and reel packaging. Gold plated pads on the mating PCB or suitable flex circuits provide connection between the boards.

Whatever your requirements this SOLO STACKER can also be customized to suit your applications.

APPLICATIONS

- Mobile Phones
- PDA
- Medical
- PMR
- Industrial
- Security
- Handheld Scanner

ELECTRICAL

- Current Rating: 1 Amp/Contact
- Voltage Rating: 125V Based on placement distance

FEATURES AND BENEFITS

- Reduced assembly time.
- Only one part to purchase and stock.
- Due to the unique contact design, the mating device does not have to be parallel.
- Extremely robust when subjected to shock and vibration.
- Cost effective.
- Helps reduce tolerance accumulation within system.

ENVIRONMENTAL

• Operating Temperature: -55°C to +125°C

MECHANICAL

- Insulator Material: High Temperature Plastic; UL94 HB
- Contact Material: Beryllium Copper
- Plating: Gold over Nickel
- Durability: 50 Cycles

HOW TO ORDER

00	9158	0XX		
T				
Prefix	Series	Number of Ways		
		016 = 16		
		020 = 20		
		024 = 24		

028 = 28

0XX					
T					
Stack Height					
020 = 1.9mm to 2.1 mm					
025 = 2.1mm to 2.7mm					
030 = 2.8mm to 3.3mm					

Plating Variation 06 = Selective Gold 0.25µm Gold Plated Contact Nose Pure Tin Tail

06



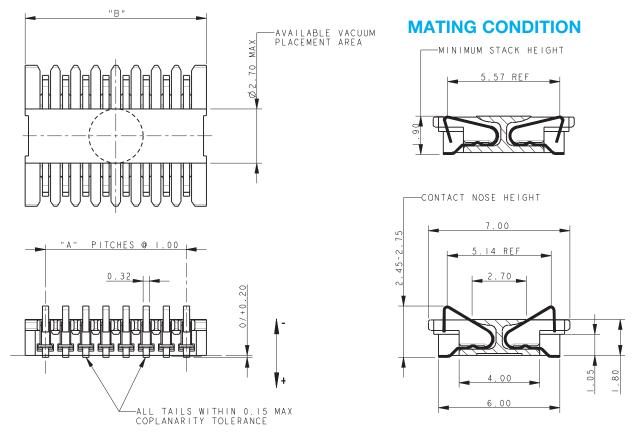
1 = With PCB Location Bosses 2 = Without PCB Location Bosses





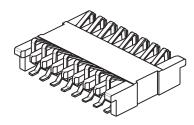


2.0MM DUAL ROW STACKER WITHOUT BOSSES



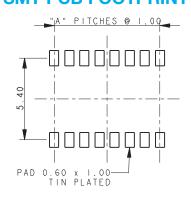
NOTES:

- 1. LAYOUT FOR MULTI-WAY DUAL ROW STACKING CONNECTOR (ELCO SERIES 9158).
- 2. FOR FULL PRODUCT SPECIFICATION REFER TO ELCO SPEC 201-01-073.
- 3. PART TO BE PACKED IN TAPE AND REEL. REFER TO PAGE 116 FOR DETAILS.
- 4. STACKER DESIGN TO ACCOMMODATE A PCB STACKING HEIGHT OF 1.90MM TO 2.10MM.
- 5. NO ALLOWANCE HAS BEEN MADE FOR SOLDER PASTE THICKNESS IN PCB STACKING HEIGHT.
- 6. GENERAL TOLERANCE ±0.20 UNLESS OTHERWISE STATED.

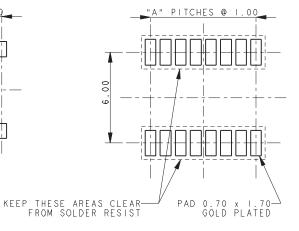


No of Positions	Part Number	Α	В
16	00-9158-016-020-062	7	9.00
20	00-9158-020-020-062	9	11.00
24	00-9158-024-020-062	11	13.00
28	00-9158-028-020-062	13	15.00

SMT PCB FOOTPRINT

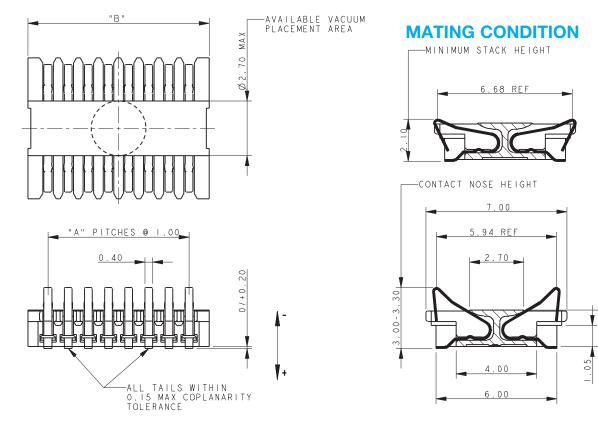


MATING PCB FOOTPRINT



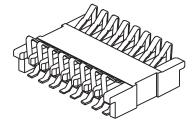


2.5MM DUAL ROW STACKER WITHOUT BOSSES

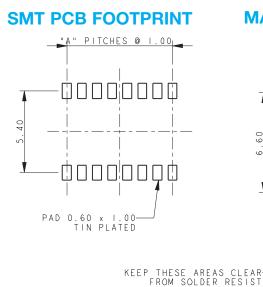


NOTES:

- 1. LAYOUT FOR MULTI-WAY DUAL ROW STACKING CONNECTOR (ELCO SERIES 9158).
- 2. FOR FULL PRODUCT SPECIFICATION REFER TO ELCO SPEC 201-01-073.
- 3. PART TO BE PACKED IN TAPE AND REEL. REFER TO PAGE 116 FOR DETAILS.
- 4. STACKER DESIGN TO ACCOMMODATE A PCB STACKING HEIGHT OF 2.10MM TO 2.70MM.
- NO ALLOWANCE HAS BEEN MADE FOR SOLDER PASTE THICKNESS IN PCB STACKING HEIGHT.
- 6. GENERAL TOLERANCE ± 0.20 UNLESS OTHERWISE STATED.



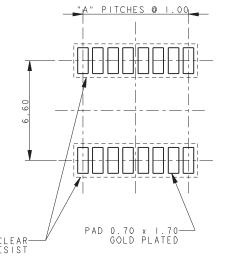
No of Positions	Part Number	Α	В
16	00-9158-016-020-062	7	9.00
20	00-9158-020-020-062	9	11.00
24	00-9158-024-020-062	11	13.00
28	00-9158-028-020-062	13	15.00



/AV/X

MATING PCB FOOTPRINT

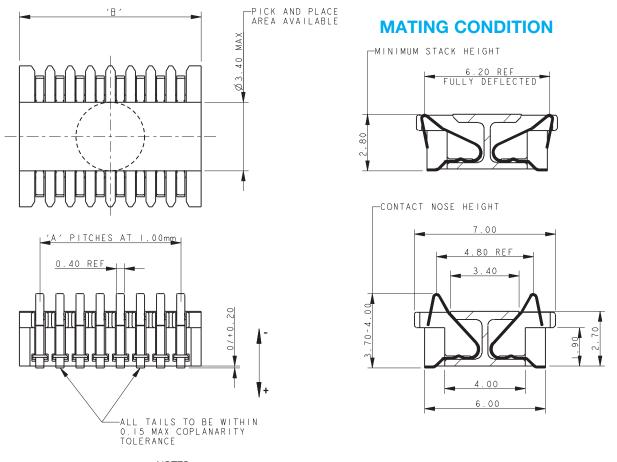
80



012519



3.0MM DUAL ROW STACKER WITHOUT BOSSES

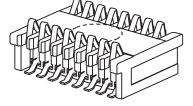


NOTES:

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G

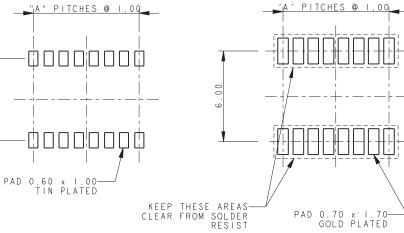
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- 3. PART TO BE PACKED IN TAPE AND REEL. REFER TO PAGE 116 FOR DETAILS.
- 4. STACKER DESIGN TO ACCOMMODATE A PCB STACKING HEIGHT OF 2.80MM TO 3.30MM.
- 5. NO ALLOWANCE HAS BEEN MADE FOR SOLDER PASTE THICKNESS IN PCB STACKING HEIGHT.
- 6. GENERAL TOLERANCE ±0.20 UNLESS OTHERWISE STATED.



No of Positions	Part Number		В
16	00-9158-016-020-062	7	9.00
20	00-9158-020-020-062	9	11.00
24	00-9158-024-020-062	11	13.00
28	00-9158-028-020-062	13	15.00



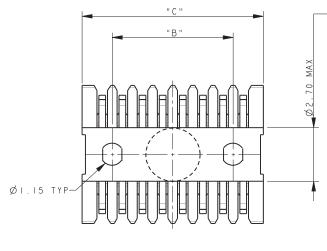
MATING PCB FOOTPRINT







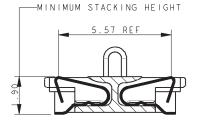
2.0MM DUAL ROW STACKER WITH BOSSES

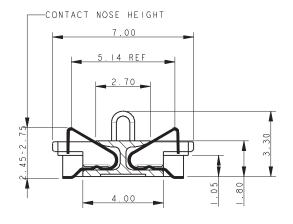


ALL TAILS WITHIN 0.15 MAX COPLANARITY TOLERANCE

-AVAILABLE VACUUM PLACEMENT AREA

MATING CONDITION





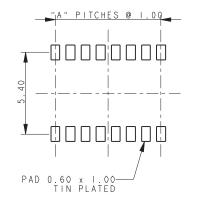
NOTES:

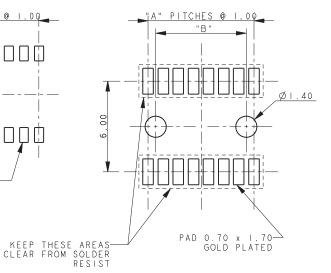
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- 4. STACKER DESIGN TO ACCOMMODATE A PCB STACKING HEIGHT OF 1.90MM TO 2.10MM.
- NO ALLOWANCE HAS BEEN MADE FOR SOLDER PASTE THICKNESS IN PCB STACKING HEIGHT.
- GENERAL TOLERANCE ±0.20 UNLESS OTHERWISE STATED.
 - GENERAL TOLERANGE ± 0.20 UNLESS OTHERWISE STATED.

SMT PCB FOOTPRINT

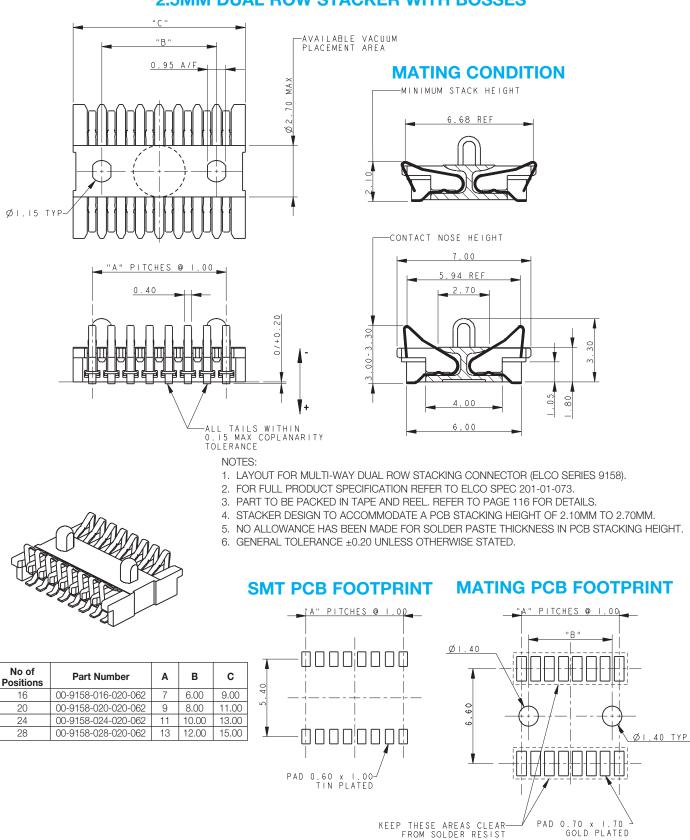
MATING PCB FOOTPRINT

		-		
No of Positions	Part Number	Α	В	С
16	00-9158-016-020-062	7	6.00	9.00
20	00-9158-020-020-062	9	8.00	11.00
24	00-9158-024-020-062	11	10.00	13.00
28	00-9158-028-020-062	13	12.00	15.00







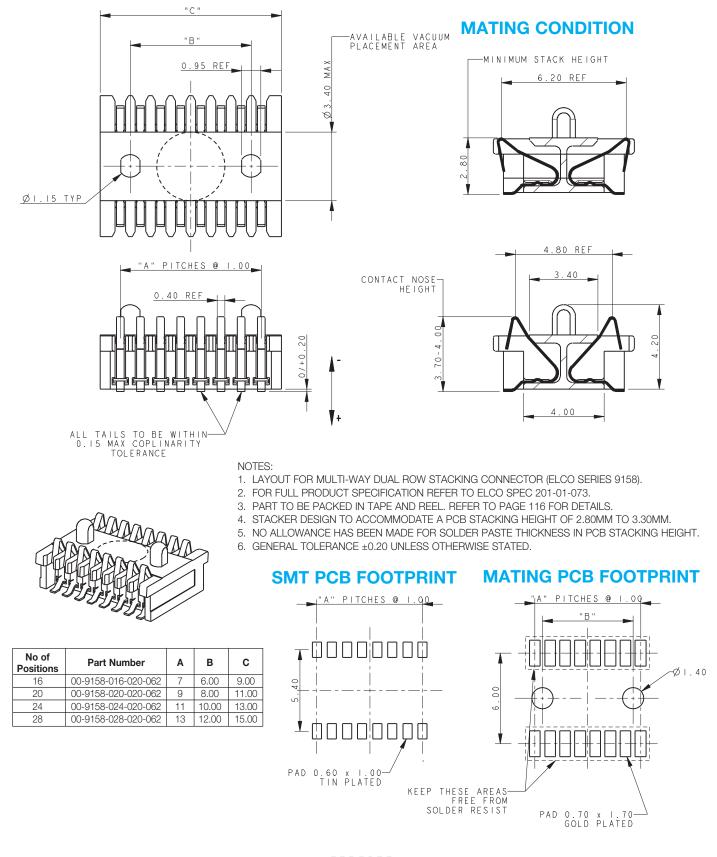


2.5MM DUAL ROW STACKER WITH BOSSES





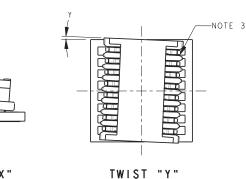
3.0MM DUAL ROW STACKER WITH BOSSES

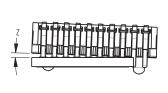






LIMITS TO PCB MISALIGNMENT





END TILT "Z"

SIDE TILT "X"

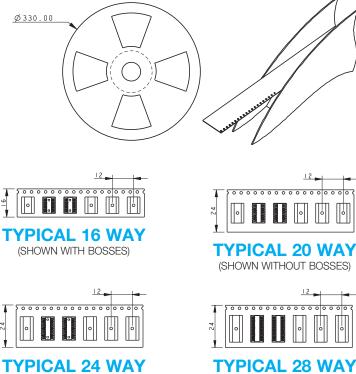
Code	Stack Height (Note 1)	Max Angle Degrees on Axis (Note 4)	Number of Ways			
(See page 107)			16	20	24	28
	1.9mm to 2.1mm	Х	2.0	2.0	2.0	2.0
020		Y	3.5	3.5	3.5	3.5
		Z	2.0	1.5	1.0	1.0
	2.1mm to 2.7mm	Х	4.0	4.0	4.0	4.0
025		Y	2.5	2.5	2.5	2.5
		Z	4.0	3.0	2.5	2.0
	2.7mm to 3.3mm	Х	4.0	4.0	4.0	4.0
030		Y	2.5	2.5	2.5	2.5
		Z	3.5	2.5	2.0	2.0

NOTES:

- 1. PCB STACK HEIGHT (REF PAGE 109). THIS IS THE CONTROLLING LIMIT ON THE GAP BETWEEN THE TWO PCB FACES AT ANY POINT WHEN IN THE FINAL MATED POSITION.
- 2. NO ALLOWANCE HAS BEEN MADE FOR SOLDER PASTE THICKNESS IN PCB STACKING HEIGHT.
- 3. IT IS CRITICAL THAT ON ASSEMBLY THE CONTACT NOSES DO NOT STRAY OUTSIDE OF THE MATING PAD AREA IN THE FINAL MATED POSITION.
- 4. THE MAXIMUM MISALIGNMENT ABOUT ANY ONE AXIS IN DEGREES. SEE NOTES 1 AND 3.

PACKING DETAILS 9158 SOLO STACKER CONNECTORS

No of Positions	Stack Height	Bosses	Part Number	Tape Width	Reel Qty.
16	2.0	Yes	00-9158-016-020-0X1	16	1250
16	2.0	No	00-9158-016-020-0X2	16	1500
16	2.5	Yes	00-9158-016-025-0X1	16	1250
16	2.5	No	00-9158-016-025-0X2	16	1250
16	3.0	Yes	00-9158-016-030-0X1	16	1100
16	3.0	No	00-9158-016-030-0X2	16	1100
20	2.0	Yes	00-9158-020-020-0X1	24	1250
20	2.0	No	00-9158-020-020-0X2	24	1500
20	2.5	Yes	00-9158-020-025-0X1	24	1250
20	2.5	No	00-9158-020-023-0X2	24	1250
20	3.0	Yes	00-9158-020-030-0X1	24	1100
20	3.0	No	00-9158-020-030-0X2	24	1100
24	2.0	Yes	00-9158-024-020-0X1	24	1250
24	2.0	No	00-9158-024-020-0X2	24	1500
24	2.5	Yes	00-9158-024-025-0X1	24	1250
24	2.5	No	00-9158-024-025-0X2	24	1250
24	3.0	Yes	00-9158-024-030-0X1	24	1100
24	3.0	No	00-9158-024-030-0X2	24	1100
28	2.0	Yes	00-9158-028-020-0X1	24	1250
28	2.0	No	00-9158-028-020-0X2	24	1500
28	2.5	Yes	00-9158-028-025-0X1	24	1250
28	2.5	No	00-9158-028-025-0X2	24	1250
28	3.0	Yes	00-9158-028-030-0X1	24	1100
28	3.0	No	00-9158-028-030-0X2	24	1100



(SHOWN WITHOUT BOSSES)

(SHOWN WITH BOSSES)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Kyocera AVX:

 009158016020061
 009158016025061
 009158016025062
 009158020025061
 009158020025062

 009158020030061
 009158024025062
 009158024030061
 009158028025062
 009158024020061
 009158016030061

 009158016030062
 009158020020062
 009158024020062
 009158024030062
 009158028020061

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