

# Customer Information Sheet

DRAWING No.: G125-MHXXX05L3R

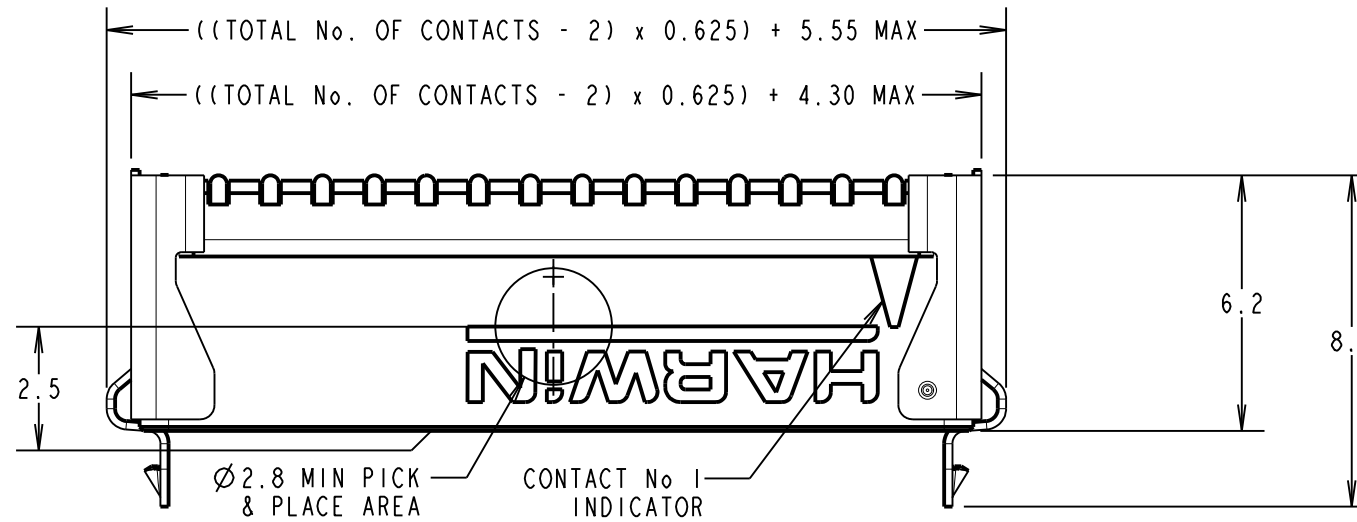
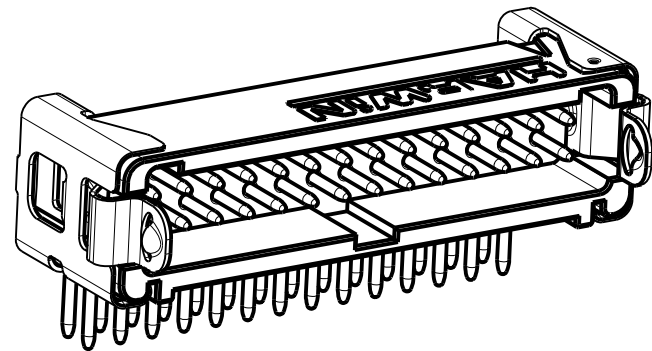
IF IN DOUBT - ASK

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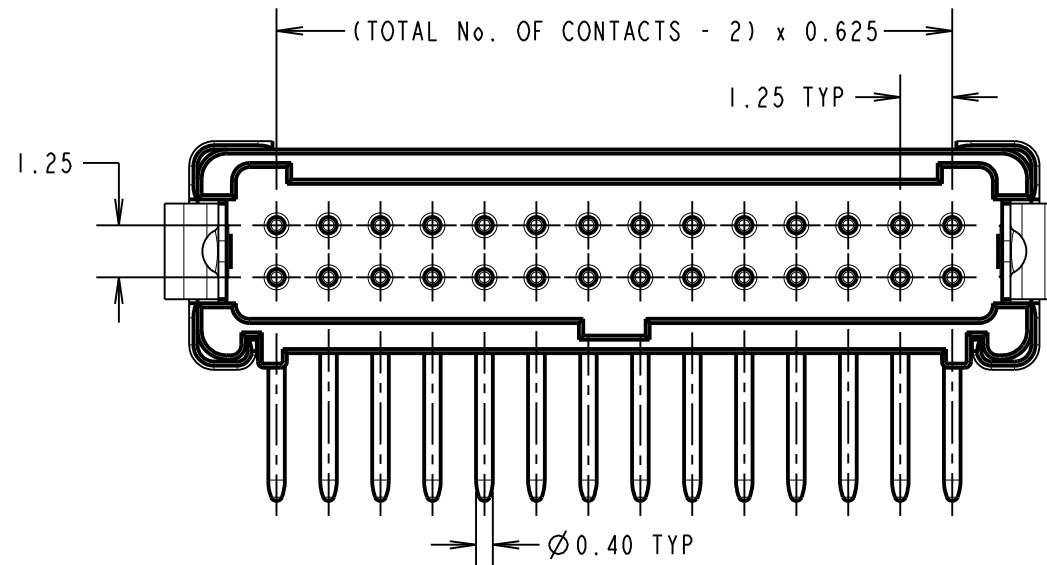
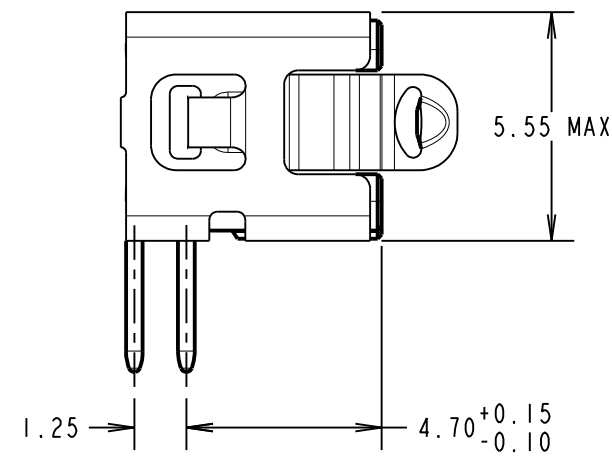
NOT TO SCALE

THIRD ANGLE PROJECTION

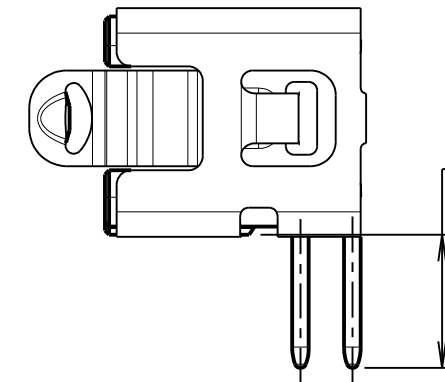
ALL DIMENSIONS IN mm



ORDER CODE:  
**G125-MHXXX05L3R**  
 3.2mm PC-TAILS = H1  
 4.7mm PC-TAILS = H2  
 TOTAL No. OF CONTACTS  
 06, 10, 12, 16, 20,  
 26, 34, 50.

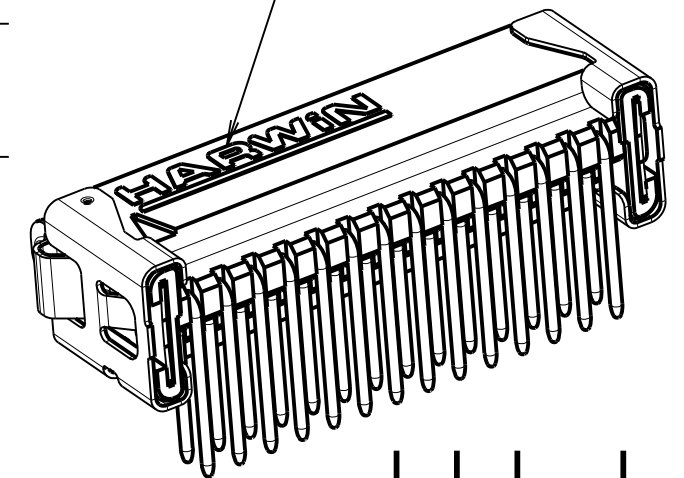


CONTACT STYLE	DIM 'Z'
H1	3.2±0.15
H2	4.7±0.15

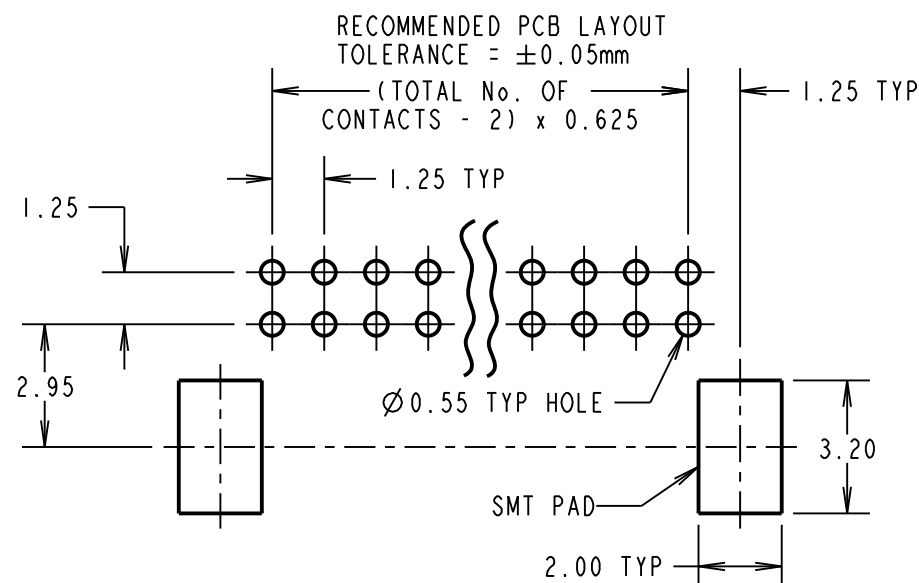


DIM 'Z'  
SEE TABLE

FULL LOGO ONLY  
 ON 20 TO 50 WAY.  
 'H' ON 6 & 10 WAY.  
 'HWN' ON 12 & 16 WAY.



CONNECTOR DETAILS AND PCB LAYOUT ONLY.  
 SEE SHEET 6 FOR TAPE AND REEL DETAILS.



NOTES:

- FOR COMPLETE SPECIFICATION, SEE COMPONENT SPECIFICATION C125XX (LATEST ISSUE). SEE G125-SERIES CONNECTORS SPECIFICATION SHEET FOR MATERIALS, FINISH AND SPECIFICATION SUMMARY.

MGP	3	08.06.21	22201
NAME	ISS.	DATE	CN/CO
APPROVED: MGP			
CHECKED: RA			
DRAWN: MARK G PLESTED			
CUSTOMER REF.:			
ASSEMBLY DRG:			

**HARWIN**  
 www.harwin.com  
 technical@harwin.com

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TOLERANCES  
 X. = ±1mm  
 X.X = ±0.50mm  
 X.XX = ±0.20mm  
 X.XXX = ±0.01mm  
 ANGLES = ±5°  
 UNLESS STATED

MATERIAL:  
 SEE NOTE 1  
 FINISH: SEE NOTE 1  
 S/AREA: mm<sup>2</sup>

TITLE:  
 G125 MALE HORIZONTAL PC TAIL  
 SERIES IN TAPE & REEL  
 DRAWING NUMBER:  
**G125-MHXXX05L3R**  
 SHT 5 OF 6

# Customer Information Sheet

DRAWING No.: G125-MHXXX05L3R

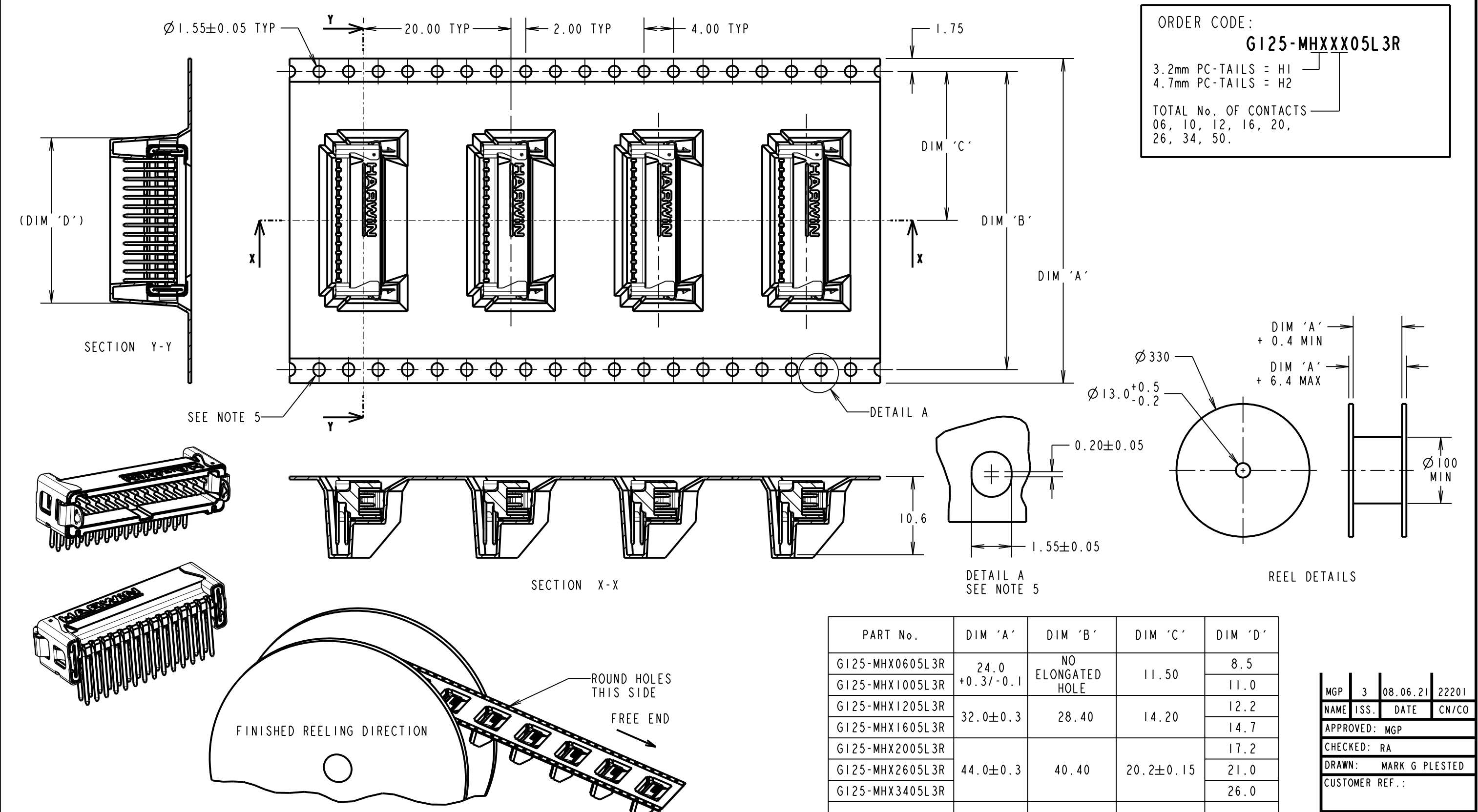
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NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm



ORDER CODE:  
**G125-MHXXX05L3R**  
 3.2mm PC-TAILS = H1  
 4.7mm PC-TAILS = H2  
 TOTAL No. OF CONTACTS  
 06, 10, 12, 16, 20,  
 26, 34, 50.

PART No.	DIM 'A'	DIM 'B'	DIM 'C'	DIM 'D'
G125-MHX0605L3R	24.0	NO ELONGATED HOLE	11.50	8.5
G125-MHX1005L3R	+0.3/-0.1			11.0
G125-MHX1205L3R				12.2
G125-MHX1605L3R	32.0±0.3	28.40	14.20	14.7
G125-MHX2005L3R				17.2
G125-MHX2605L3R	44.0±0.3	40.40	20.2±0.15	21.0
G125-MHX3405L3R				26.0
G125-MHX5005L3R	56.0±0.3	52.40	26.2±0.15	36.0

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CUSTOMER REF.:			
ASSEMBLY DRG:			

- NOTES:
1. QUANTITY OF COMPONENTS PER REEL = 250.
  2. FOR OTHER QUANTITIES SEE G125-MHXXX05L3P.
  3. THIS PRODUCT IS TAPED AND REELED IN GENERAL ACCORDANCE WITH EIA-481-2-A (ELECTRONIC INDUSTRIES ASSOCIATION).
  4. FOR COMPLETE SPECIFICATION, SEE COMPONENT SPECIFICATION C125XX (LATEST ISSUE).
  5. ELONGATED SPROCKET HOLE NOT PRESENT ON 06 & 10 POSITIONS.
  6. SEE SHEET 5 FOR CONNECTOR DETAILS.

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 ANGLES = ±5°  
 UNLESS STATED

MATERIAL:  
 SEE SHEET 5  
 FINISH: SEE SHEET 5  
 S/AREA: mm<sup>2</sup>

TITLE:  
 G125 MALE HORIZONTAL PC TAIL SERIES IN TAPE & REEL  
 DRAWING NUMBER:  
**G125-MHXXX05L3R**  
 SHT 6 OF 6

# Customer Information Sheet

DRAWING No.: G125-SERIES COMPONENT SPECIFICATION

IF IN DOUBT - ASK

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NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

**SPECIFICATIONS:**

**MATERIALS:**

MOULDING, PICK & PLACE CAP:  
POLYAMIDE, PA4T-GF30 FR(40) UL94V-0,  
HALOGEN FREE, FREE OF RED PHOSPHORUS

**CONTACTS:**

SIGNAL CONTACTS:  
MALE PC-TAIL/SMT = PHOSPHOR BRONZE  
MALE CRIMP = BRASS  
ALL FEMALE CONTACTS = BERYLLIUM COPPER  
POWER CONTACTS:  
ALL CONTACTS = BERYLLIUM COPPER

**LOCKING HARDWARE:**

LATCHES: COPPER NICKEL TIN ALLOY  
SCREW LOCK: STAINLESS STEEL

BACK POTTING COMPOUND (CABLE ASSEMBLIES ONLY):  
STYCAST 2651 MM BACK POTTING WITH CATALYST 9

**FINISH:**

ALL SIGNAL CONTACTS:  
0.2-0.3µm GOLD OVER NICKEL  
ALL POWER CONTACTS:  
0.76-1.00µm GOLD OVER 1.50-2.50µm NICKEL  
AND COPPER FLASH  
LATCHES:  
3.0µm 100% TIN OVER NICKEL

**MECHANICAL:**

DURABILITY = 1000 OPERATIONS  
RETENTION IN HOUSING (ALL CONTACTS) = 6.0N MIN  
SIGNAL CONTACTS:  
INSERTION FORCE = 2.8N MAX  
WITHDRAWAL FORCE = 0.2N MIN  
POWER CONTACTS:  
INSERTION FORCE = 7.0N MAX  
WITHDRAWAL FORCE = 0.2N MIN  
SCREW-LOK:  
RETENTION IN HOUSING = 20.0N MIN  
LATCHES:  
RETENTION IN HOUSING = 4.0N MIN

**ENVIRONMENTAL:**

CLASSIFICATION: 65/150/56 DAYS AT 93% RH

**TEMPERATURE RANGE:**

\* EIA-364-32 : 2000 TEST CONDITION IV, DWELL  
30mins, 5 CYCLES -65°C TO +150°C

**MECHANICAL:**

**VIBRATION AND SHOCK:**

\* EIA-364-28D : 1999: TEST CONDITION IV: VIBRATION SEVERITY:  
10Hz TO 2000Hz, 1.5mm, 198mm/s<sup>2</sup> (20G). DURATION 2Hr  
\* EIA-364-28D : 1999: TEST CONDITION IV: VIBRATION SEVERITY:  
10Hz TO 2000Hz, 1.5mm, 198mm/s<sup>2</sup> (20G). DURATION 2Hr  
\* EIA-364-27B : 1996: TEST CONDITION E SHOCK SEVERITY: 981mm/s<sup>2</sup>  
(100G) FOR 6ms IN Z AXIS, 490mm/s<sup>2</sup> (50G) FOR 11m/s IN X & Y AXIS.  
\* EIA-364-01A : 2000: ACCELERATION: 490mm/s<sup>2</sup> (50G)  
\* BUMP SEVERITY: 390mm/s<sup>2</sup> (40G), 4000±10 BUMPS  
\* TESTED WITH LATCHED CONNECTORS

**ELECTRICAL:**

**CURRENT RATING:**

**SIGNAL CONTACTS:**

EIA-364-70A : 1998: INDIVIDUAL CONTACT IN ISOLATION AT 25°C = 2.8A MAX  
EIA-364-70A : 1998: ALL CONTACTS SIMULTANEOUSLY AT 25°C = 2.0A MAX

**POWER CONTACTS:**

EIA-364-70A : 1998: PER CONTACT, THROUGH ALL CONTACTS = 10A MAX

**CONTACT RESISTANCE:**

EIA-364-06C : 2006: INITIAL CONTACT RESISTANCE = 20mΩ MAX  
EIA-364-06C : 2006: CONTACT RESISTANCE AFTER CONDITIONING = 25mΩ MAX

**VOLTAGE PROOF:**

EIA-364-20C : 2004: SEA LEVEL (1013mbar) = 600V DC/AC PEAK  
EIA-364-20C : 2004: ALTITUDE LEVEL (44mbar, 21,336m/70,000ft) = 350V DC/AC PEAK

**WORKING VOLTAGE:**

AT SEA LEVEL (1006mbar) = 450V DC/AC PEAK  
AT ALTITUDE (44mbar, 21,336m/70,000ft) = 250V DC/AC PEAK

**INSULATION RESISTANCE:**

EIA-364-21C : 2000: INSULATION RESISTANCE (INITIAL)  
= 10GΩ MIN AT 500V DC  
EIA-364-21C : 2000: INSULATION RESISTANCE (AFTER CONDITIONING)  
= >1GΩ MIN AT 500V DC

FOR FULL COMPONENT SPECIFICATION SEE C125XX (LATEST ISSUE).



PATENTED TECHNOLOGY

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UNLESS STATED

**MATERIAL:**

SEE ABOVE

**FINISH:**

SEE ABOVE

**S/AREA:**

mm<sup>2</sup>

**TITLE:**

G125 SERIES COMPONENT SPECIFICATION

**DRAWING NUMBER:**

**G125-SERIES CONNECTORS**

SHT  
1  
OF  
1

RTP	5	04.10.19	22083
NAME	ISS.	DATE	C/NOTE
APPROVED:		R.PORTLOCK	
CHECKED:		S.BENNETT	
DRAWN:		S.FLOWER	
CUSTOMER REF.:			
ASSEMBLY DRG:			