

Special Contact Part No:

301 = COAX - FEMALE, Vertical PC Tail, 3.0mm tail

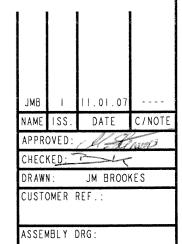
302 = COAX - FEMALE, Vertical PC Tail, 4.5mm tail 305 = COAX - FEMALE, Crimp Straight, Ø2.0mm cable 306 = COAX - FEMALE, Crimp Straight, Ø2.4mm cable 307 = COAX - FEMALE, Crimp Straight, Ø2.7mm cable 308 = COAX - FEMALE, Crimp/Solder 90°, Ø2.0mm cable 309 = COAX - FEMALE, Crimp/Solder 90°, Ø2.7mm cable

321 = POWER - FEMALE, Vertical PC Tail, 3.5mm tail 322 = POWER - FEMALE, Vertical PC Tail, 5.0mm tail 325 = POWER - FEMALE, Solder Straight, 12 AWG cable 326 = POWER - FEMALE, Solder Straight, 14 AWG cable

327 = POWER - FEMALE, Solder Straight, 16 AWG cable

Part No. where only Special Contact is required:

M80-XXX Replace XXX with the above 3-digit code



HARWIN		INFORMATION OR DESCRIPTIVE MATTER SET OUT HEREON ARE CONFIDENTIAL AND COPYRIGHT X.X = ±1mm PROPERTY OF THE HADWIN X.X = ±0.25mm		TITLE: DATAMATE FEMALE MIX-TEM (GENERIC DRAWING)			
HARWIN INC HARWIN PLC U.S.A. U.K.	HARWIN PTE SINGAPORE	OR USED FOR MANUFACTURING,	X.XX = ±0.10mm X.XXX = ±0.01mm ANGLES = ±5°			DRAWING NUMBER:	SHT
TEL: (812) 542 2540 TEL: 023 9231 45 FAX: (812) 542 2541 FAX: 023 9231 45		OTHER PURPOSE WITHOUT	UNLESS STATED	S/AREA:	mm ²	M80-4XXXXXXXX-XX-XXX-XXX	OF ₃

IF IN DOUBT - ASK

(0)

NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

MATERIAL:

MOULDING = GLASS-FILLED PPS, UL94V-0, BLACK
JACKSCREW = STAINLESS STEEL
CIRCLIP = STAINLESS STEEL
SIGNAL CONTACT:
CLIP = BERYLLIUM COPPER
SHELL = BRASS
COAX CONTACT:
BODY & SLEEVE = BRASS
INSULATOR(S) = PTFE
INNER CONTACT = BERYLLIUM COPPER
LATCHING COLLAR = BERYLLIUM COPPER
POWER CONTACT:
BODY = BRASS
LATCHING COLLAR = BERYLLIUM COPPER

FINISH

SIGNAL CONTACT (01 FINISH CODE):
CLIP = 0.3µ GOLD / SHELL = 3.5-5.0µ TIN/LEAD
SIGNAL CONTACT (05 FINISH CODE):
CLIP = 0.3µ GOLD / SHELL = 0.3µ GOLD
SIGNAL CONTACT (42 FINISH CODE):
CLIP = 0.3µ GOLD / SHELL = 3.5-5.0µ 100% TIN
COAX CONTACT:
BODY, SLEEVE, INNER CONTACT = GOLD
LATCHING COLLAR = NICKEL
POWER CONTACT:
BODY = GOLD
LATCHING COLLAR = NICKEL

ELECTRICAL:

WORKING VOLTAGE - 120V AC/DC VOLTAGE PROOF - 360V AC/DC INSULATION RESISTANCE - 100 M Ω MIN SIGNAL CONTACT: CURRENT RATING AT 25°C = 3.0A MAX CURRENT RATING AT 85°C = 2.2A MAX CONTACT RESISTANCE = 25 m Ω MAX COAX CONTACT: FREQUENCY RANGE = 6GHz IMPEDANCE = 50Ω $V.S.W.R. = 1.05 + (0.04 \times FREQUENCY) GHz MAX$ CONTACT RESISTANCE = $6m\Omega$ MAX INSULATION RESISTANCE = $10^6 M\Omega$ @ 250V AC OPERATING VOLTAGE = 180V AC @ 500mA MAXIMUM VOLTAGE - 1,000V AC POWER CONTACT: CURRENT RATING - 20A CONTACT RESISTANCE = $6m\Omega$ MAX

MECHANICAL:

DURABILITY = 500 OPERATIONS
SIGNAL CONTACT:
INSERTION FORCE = 2.8N MAX
WITHDRAWAL FORCE = 0.2N MIN
COAX & POWER CONTACT:
INSERTION FORCE = 5.0N MAX
WITHDRAWAL FORCE = 0.5N MIN

ENVIRONMENTAL:

TEMPERATURE RANGE = -55° C TO $+125^{\circ}$ C

NOTES:

- 1. FOR A COMPLETE TECHNICAL SPECIFICATION, INCLUDING CONTACT NUMBERING AND COAX CRIMPING INSTRUCTIONS, SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE).
- 2. PLEASE SEE INDIVIDUAL DRAWINGS FOR DIMENSIONS AND WIRING INFORMATION ON COAX AND POWER CONTACTS.
- CRIMP AND CABLE SOLDER CONTACTS ARE SUPPLIED LOOSE, OTHER CONTACTS AND JACKSCREW VARIANTS ARE SUPPLIED ASSEMBLED.

SIGNAL CRIMP CONTACT NOTES:

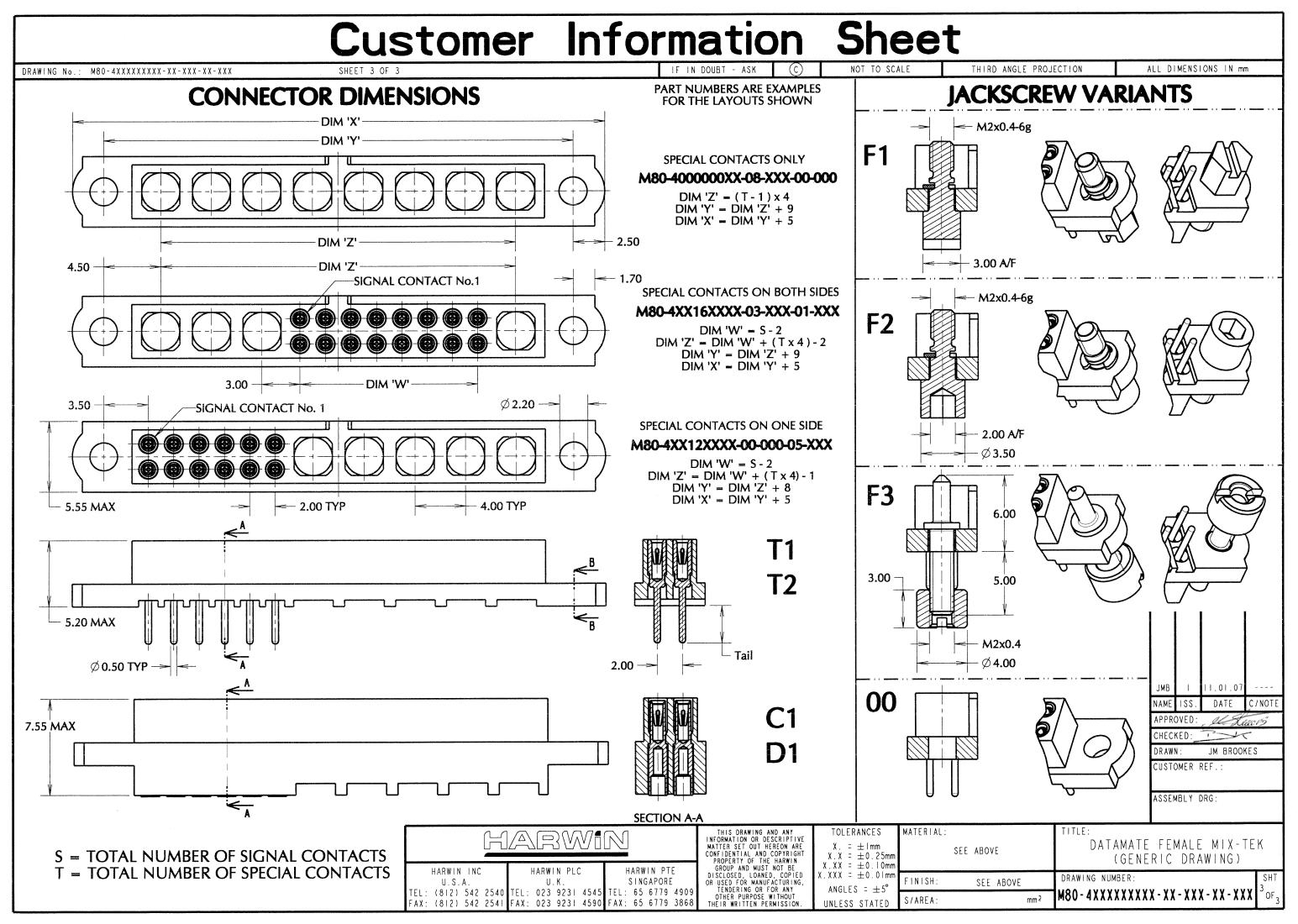
- 1. RECOMMENDED WIRE TYPE = BS 3G 210 TYPE A, PTFE INSULATED. MAX INSULATION DIA = \emptyset 1.10mm, STRIP WIRE BY 2mm.
- 2. RECOMMENDED HAND CRIMP TOOL = M22520/2-01 WITH POSITIONER T5747.
- 3. CONTACT INSERTION AND EXTRACTION TOOL = Z80-280.
- 4. FOR EXTRA CONTACTS, USE PART NUMBER M80-01100XX (LARGE BORE) OR M80-01300XX (SMALL BORE). WHERE XX = 01 FOR 100% TIN OR 05 FOR GOLD.
- INSTRUCTION SHEETS ARE AVAILABLE.

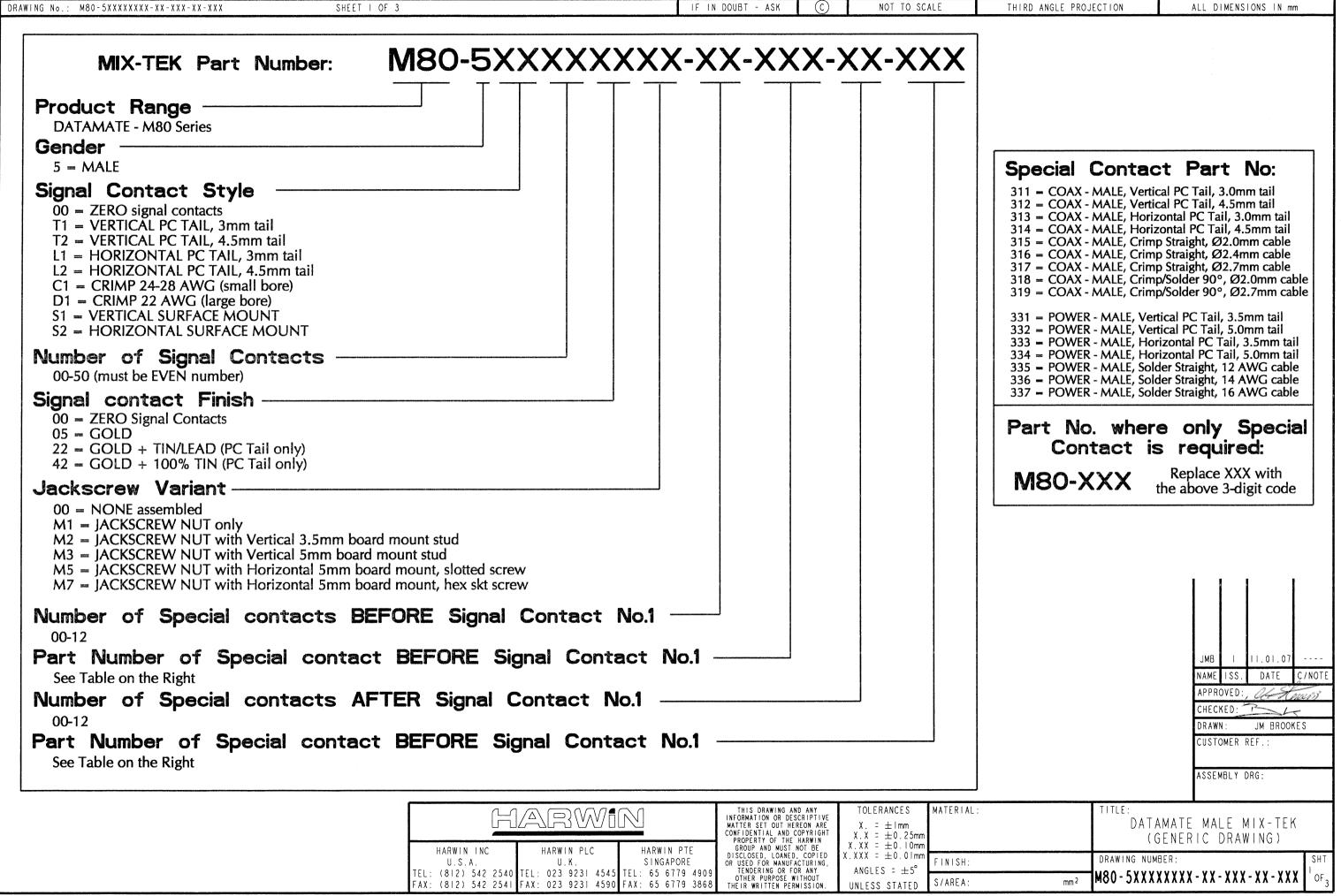
COAX CABLE CONTACT NOTES:

- 1. STRAIGHT COAX CONTACT IS SUPPLIED AS A KIT OF PARTS: BODY, INSULATOR AND LATCHING COLLAR ARE PRE-ASSEMBLED AND SLEEVE AND INNER CONTACT ARE SEPARATE.
- 2. 90° COAX CONTACT IS SUPPLIED AS A KIT OF PARTS: INSULATOR, INNER CONTACT AND LATCHING COLLAR ARE PRE-ASSEMBLED, SLEEVE AND INSULATED END PLUG ASSEMBLY ARE SEPARATE.
- 3. RECOMMENDED HAND CRIMP TOOL FOR STRAIGHT COAX INNER CONTACT = Z80-292 WITH POSITIONER Z80-291.
- 4. RECOMMENDED HAND CRIMP TOOL AND DIE SET FOR COAX SLEEVE = Z80-293.
- 5. COAX (& POWER) CONTACT EXTRACTION TOOL = Z80-290
- 6. INSTRUCTION SHEETS ARE AVAILABLE.

JMB	l	11.01.07	***			
NAME	ISS.	DATE	C/NOTE			
APPROVED: Alacini						
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DRAW	٧:	JM BROOM	KES			
CUSTOMER REF.:						
ASSEN	ABLY (ORG:				

HARWIN		INFORMATION OR DESCRIPTIVE MATTER SET OUT HEREON ARE CONFIDENTIAL AND COPYRIGHT PROPERTY OF THE HARWIN X.X = ±0.25mm		DATAMATE FEMALE MIX-TEK (GENERIC DRAWING)			
HARWIN INC U.S.A.	HARWIN PLC U.K.	HARWIN PTE SINGAPORE	GROUP AND MUST NOT BE DISCLOSED, LOANED, COPIED OR USED FOR MANUFACTURING,	X.XXX = ±0.01mm		DRAWING NUMBER: SHT	٦
 TEL: (812) 542 2540 FAX: (812) 542 2541	TEL: 023 9231 4545 FAX: 023 9231 4590	TEL: 65 6779 4909 FAX: 65 6779 3868	TENDERING OR FOR ANY OTHER PURPOSE WITHOUT THEIR WRITTEN PERMISSION.	ANGLES = ±5° UNLESS STATED	S/AREA: mm²	7 M80-4XXXXXXXXX-XX-XXX-XXX ² of	3





HARWIN PTE

SINGAPORE

U.K.

TEL: (812) 542 2540 TEL: 023 9231 4545 TEL: 65 6779 4909

FAX: (812) 542 2541 FAX: 023 9231 4590 FAX: 65 6779 3868

HARWIN INC

U.S.A.

 $X.XX = \pm 0.10$ mm

 $X.XXX = \pm 0.01$ mm

ANGLES = ±5°

UNLESS STATED

FINISH:

S/AREA.

DRAWING NUMBER:

|M80-5XXXXXXXX-XX-XXX-XXX-XXX|⁺of,

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IF IN DOUBT - ASK

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NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

MATERIAL:

MOULDING = GLASS-FILLED PPS, UL94V-0, BLACK
JACKSCREW = STAINLESS STEEL
SIGNAL CONTACT:
PC TAIL CONTACT = PHOSPHOR BRONZE
CRIMP CONTACT = BRASS
COAX CONTACT:
BODY & SLEEVE = BRASS
INSULATOR(S) = PTFE
INNER CONTACT (PC TAIL) = PHOSPHOR BRONZE
INNER CONTACT (CRIMP) = BRASS
LATCHING COLLAR = BERYLLIUM COPPER
POWER CONTACT:
BODY = BRASS

EINICH.

SIGNAL CONTACT (05 FINISH CODE):

PC TAIL CONTACT ~ 0.75μ GOLD ON CONTACT AREA,

0.3μ GOLD ON TAILS

SIGNAL CONTACT (22 FINISH CODE):

SIGNAL CONTACT (22 FINISH CODE):
PC TAIL CONTACT = 0.75μ GOLD ON CONTACT AREA,
3.0μ TIN/LEAD ON TAILS

SIGNAL CONTACT (42 FINISH CODE):
PC TAIL CONTACT = 0.75\(\mu\) GOLD ON CONTACT AREA,
3.0\(\mu\) 100\% TIN ON TAILS

CRIMP CONTACT = 0.3µ GOLD
COAX CONTACT:
BODY, SLEEVE, INNER CONTACT = GOLD
LATCHING COLLAR = NICKEL
POWER CONTACT:
BODY = GOLD
LATCHING COLLAR = NICKEL

LATCHING COLLAR - BERYLLIUM COPPER

ELECTRICAL: WORKING VOLTAGE = 120V AC/DC

VOLTAGE PROOF = 360V AC/DC INSULATION RESISTANCE = 100 M Ω MIN SIGNAL CONTACT: CURRENT RATING AT 25°C = 3.0A MAX CURRENT RATING AT 85° C = 2.2A MAX CONTACT RESISTANCE = 25 m Ω MAX COAX CONTACT: FREQUENCY RANGE = 6GHz IMPEDANCE - 50Ω $V.S.W.R. = 1.05 + (0.04 \times FREQUENCY) GHz MAX$ CONTACT RESISTANCE = $6m\Omega$ MAX INSULATION RESISTANCE - 10°M\(\Omega\) @ 250V AC OPERATING VOLTAGE - 180V AC @ 500mA MAXIMUM VOLTAGE - 1,000V AC **POWER CONTACT:** CURRENT RATING = 20A

MECHANICAL:

DURABILITY = 500 OPERATIONS
SIGNAL CONTACT:
INSERTION FORCE = 2.8N MAX
WITHDRAWAL FORCE = 0.2N MIN
COAX & POWER CONTACT:
INSERTION FORCE = 5.0N MAX
WITHDRAWAL FORCE = 0.5N MIN

CONTACT RESISTANCE - $6m\Omega$ MAX

ENVIRONMENTAL: TEMPERATURE RANGE = -55° C TO + 125° C

NOTES:

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SIGNAL CRIMP CONTACT NOTES:

- 1. RECOMMENDED WIRE TYPE = BS 3G 210 TYPE A, PTFE INSULATED. MAX INSULATION DIA = \emptyset 1.10mm, STRIP WIRE BY 2mm.
- 2. RECOMMENDED HAND CRIMP TOOL = M22520/2-01 WITH POSITIONER T5747.
- 3. CONTACT INSERTION AND EXTRACTION TOOL = Z80-280.
- 4. FOR EXTRA CONTACTS, USE PART NUMBER M80-19400XX (LARGE BORE) OR M80-19500XX (SMALL BORE). WHERE XX = 06 FOR 100% TIN OR 05 FOR GOLD.
- 5. INSTRUCTION SHEETS ARE AVAILABLE.

COAX CABLE CONTACT NOTES:

- 1. STRAIGHT COAX CONTACT IS SUPPLIED AS A KIT OF PARTS: BODY, INSULATOR AND LATCHING COLLAR ARE PRE-ASSEMBLED AND SLEEVE AND INNER CONTACT ARE SEPARATE.
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- 4. RECOMMENDED HAND CRIMP TOOL AND DIE SET FOR COAX SLEEVE = Z80-293.
- 5. COAX (& POWER) CONTACT EXTRACTION TOOL = Z80-290
- 6. INSTRUCTION SHEETS ARE AVAILABLE.

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CUSTOMER REF.:						
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	HARWIN INC U.S.A.	HARWIN PLC U.K.	HARWIN PTE SINGAPORE	GROUP AND MUST NOT BE DISCLOSED, LOANED, COPIED OR USED FOR MANUFACTURING,	$X.XX = \pm 0.10$ mm $X.XXX = \pm 0.01$ mm	FINISH:	DRAWING NUMBER:	SHT	
	TEL: (812) 542 2540 FAX: (812) 542 2541	TEL: 023 9231 4545 FAX: 023 9231 4590	TEL: 65 6779 4909 FAX: 65 6779 3868		ANGLES = ±5° UNLESS STÄTED	S/AREA: mm²	M80 - 5XXXXXXXXX - XX - XXX - XX - XXX	OF ₃	ı

TOLEDANCES MATERIAL

