Part Submission Warrant 13-ISIR10977

Part Name: TRMNL WIR SNP ON MALE | Cust. Part Number: 7114-6546-02

Shown on Drawing No.: 9U5T-14421-BA | Org. Part Number: 0-1924275-1 (9U5T-14421-BA)

Engineering Change Level: AELE-E-11783996-900 | Dated: 21-févr-12

Additional Engineering Changes: N/A | Dated: N/A

Safety and/or Government Regulation: ☐ Yes ☑ No | Purchase Order No.: N/A | Weight (g): 0,1504

Checking Aid No.: N/A | Checking Aid Engineering Change Level: N/A | Dated: N/A

ORGANIZATION MANUFACTURING INFORMATION

TYCO US North Carolina
Supplier Name & Supplier Code

233 Burgess Road
Street Address

Greensboro US 27409
City State Zip

CUSTOMER SUBMITTAL INFORMATION

Yazaki
Customer Name/Division

Buyer/Buyer Code: N/A

Application: FORD

MATERIALS REPORTING

Has customer-required Substances of Concern Information been reported? ☑ YES ☐ NO ☐ n/a

Submitted by IMDS or other customer format: 86751485 / 3

Are polymeric parts identified with appropriate ISO marking codes? ☐ YES ☑ NO ☐ n/a

REASON FOR SUBMISSION

- ☐ Initial Submission
- ☐ Engineering Change(s)
- ☐ Tooling: Transfer, Replacement, Refurbishment or additional
- ☐ Correction of Discrepancy
- ☐ Tooling Inactive > 1 year
- ☐ Change to Optional Construction or Material
- ☐ Sub-Supplier or Material Source Change
- ☐ Change in Part Processing
- ☐ Part Produced at Additional Location
- ☑ Other - Please specify below: Requalification

REQUESTED SUBMISSION LEVEL (Check one)

- ☑ Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.
- ☐ Level 2 - Warrant with product samples and limited supporting data submitted to customer.
- ☐ Level 3 - Warrant with product samples and complete supporting data submitted to customer.
- ☐ Level 4 - Warrant and other requirements as defined by customer.
- ☐ Level 5 - Warrant with product samples and complete supporting data reviewed at supplier's manufacturing location.

SUBMISSION RESULTS

The results for ☐ dimensional measurements ☐ material and functional tests ☐ appearance criteria ☐ statistical process package

These results meet all drawing and specification requirements: ☑ YES ☐ NO (If "NO" - Explanation Required)

Mold / Cavity / Production Process: Die

DECLARATION

I hereby affirm that the samples represented by this warrant are representative of our parts, have been made to the applicable Production Part Approval Process Manual 4th Edition Requirements. I further affirm that these samples were produced at the production rate of / hours. I also certify that documented evidence of such compliance is on file and available for review. I have noted any deviations from this declaration below.

EXPLANATION/COMMENTS:

Is each Customer Tool Properly tagged and numbered? ☐ YES ☐ NO ☑ n/a

Organization Authorized Signature: C.LeMoan Date: 23-avr-13

Print Name: Catherine LE MOAN Phone No.: 01 34 20 86 87 Fax No.: 01 34 20 86 10

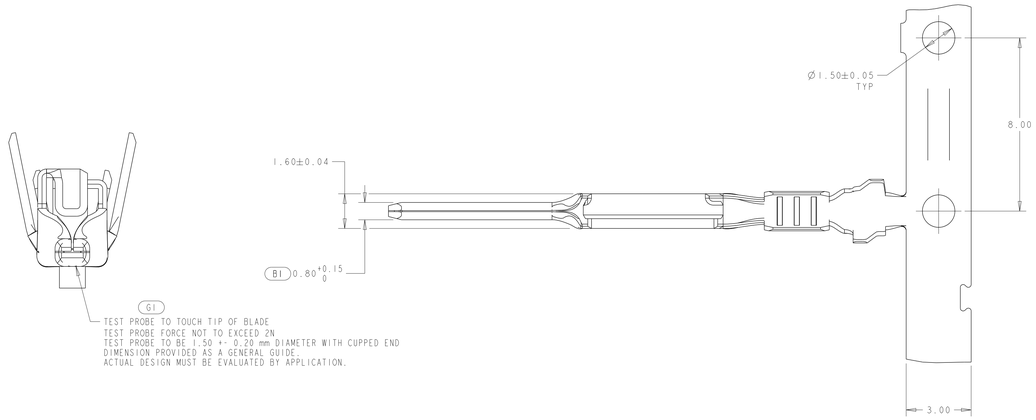
Title: Quality Assurance E-mail: clemoan@tycoelectronics.com

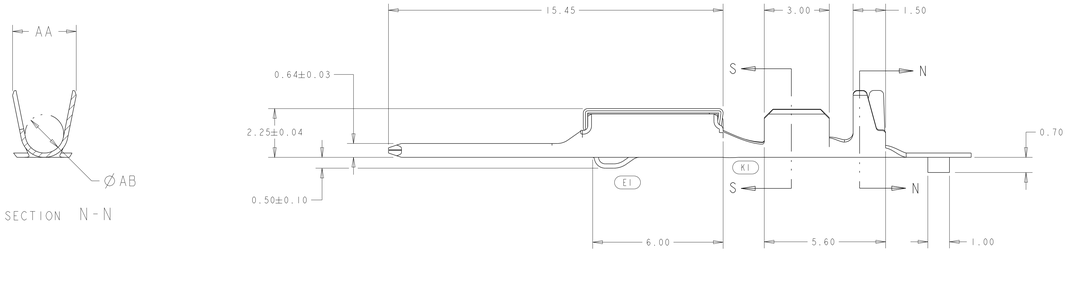
FOR CUSTOMER USE ONLY (IF APPLICABLE)

Part Warrant Disposition: ☑ Approved ☐ Rejected ☐ Other

Customer Signature: Ana Sofia Soares Date: 04-06-2013

Print Name: YAZAKI EUROPE Limited Customer Tracking Number (optional):





0.64mm MALE TERMINAL
SCALE 10:1

NOTES FOR TERMINAL

1. PARTS MUST CONFORM TO THE ELECTRICAL CONNECTION SYSTEM DESIGN SPECIFICATION (SDS) VER. 13, DATED 29/MAR/06
F2 2. PART MUST CONFORM TO THE LATEST LEVEL OF USCAR-2 DATED 14/JAN/04, EXCEPT FOR 4N TERMINAL BEND RESISTANCE ON 0.13mm² GRIP TERMINAL.
A TERMINAL INSERTION TOOL MAY BE USEFUL FOR 0.13mm² WIRE. 0.13mm² GRIP NOT INTENDED FOR SEALED APPLICATIONS.
3. REFERENCE TE CONNECTIVITY APPLICATION SPECIFICATION 114-13183
4. N/A
5. N/A
F2 6. N/A
7. FORD MOTOR COMPANY APPROVAL REQUIRED FOR ALL SOURCING AND TOOLING OF THIS PART
8. FOR ENGINEERING APPROVED SOURCE SEE ENGINEERING RELEASE
9. ENGINEERING APPROVAL OF SAMPLE FROM EACH SUPPLIER IS REQUIRED PRIOR TO AUTHORIZATION OF PART PRODUCTION.
10. CHANGES IN DESIGN COMPOSITION OR PROCESSING FROM THE PART PREVIOUSLY APPROVED FOR PART PRODUCTION REQUIRES PRIOR ENGINEERING APPROVAL.
11. GENERAL TOLERANCES: ± 0.3 ALL ONE PLACE DIMENSIONS, ± 0.15 ALL TWO PLACE DIMENSIONS, ±1° ALL ANGULAR DIMENSIONS.
12. N/A
13. 0.2mm MAXIMUM RADIUS PERMISSIBLE ON EDGES AND FILLETS SHOWN AS SHARP FOR STAMPING PARTS
14. N/A
15. N/A
16. SOURCE IDENTIFICATION MARK AND PRODUCTION DATE CODE MUST BE PERMANENTLY APPLIED ON THE PART WITH 0.65mm LETTER SIZE FROM THE BOTTOM TO THE TOP OF THE CHARACTER AND LEGIBLE WHEREVER PACKAGE SIZE PERMITS OR OTHER AGREEMENTS ARE MADE.
17. DRAWING CONFORMS TO AVP- (T40)/T406) -001 REVISION C DATED 08/AUG/03
18. CONTACTS ARE TERMINATED WITH AMP-O-LECTRIC MODEL "G"; TE CONNECTIVITY PART NO. 354500-1, WITH TE CONNECTIVITY APPLICATOR PART NO: SEE RECOMMENDED CRIMP TOOL TABLE.
19 ES-AU5T-1A348-AA WIRE CODES ARE LISTED FOR REFERENCE ONLY. THE RESPONSIBLE ENGINEER MUST SELECT WIRE TYPE THAT IS CAPABLE OF SATISFYING THE ENVIRONMENTAL CONSTRAINTS OF THE APPLICATION.
J3 20 THIS WIRE HAS NOT BEEN VALIDATED FOR SEALING.
J3 21 NOT RELEASED FOR PRODUCTION

RECOMMENDED CRIMP TOOL			
FORD PART NUMBER	TE CONNECTIVITY PART NUMBER	APPLICATION TOOLING	
9U5T-14421-BA	1924275-1	SEE TE CONNECTIVITY PART NO 1385873-3	
9U5T-14421-CA	1924275-2	SEE TE CONNECTIVITY PART NO 1852097-3	
9U5T-14421-ZA 20	1924275-5	SEE TE CONNECTIVITY PART NO 1855452-3	F3
DU5T-14421-FA 20 21	1924275-6	SEE TE CONNECTIVITY PART NO 1855453-3	J2

LTRS	REVISIONS			
ORIGINATOR	CHECKER	ENGR APP	MATL APP	
RELEASED 9U5T-14421-BA FOR PRODUCTION AUTHORITY ARCHIVE DATE: 071105 AELE-E-117783996-276			( )	
H. MOLL	J. HALL	G. LEECE		
A1 - CHANGE DRAWING FORMAT SIZE TO A0/E A2 - ADD 9U5T-14421-ZA A3 - ADDED 9U5T-14421-CAA A4 - ADD NOTES 19, 20 A5 - ADD CODE ES-AU5T-1A348-AA TO TABLES ON SHEET 1 ARCHIVE DATE: 081001 AELE-E-117783996-380			( )	
D. HARDY	J. HALL	G. LEECE		
B1 - ADDED +0.15/-0 TOLERANCE TO 0.80 DIM B2 - WAS 0.80±0.03 AELE-E-117783996-420			DATE: 081114 ( )	
R. VESTAL	C. SCHMID	G. LEECE		
C1 - SHT 3 SECTION Z-Z: REMOVED NOTE C2 - SHT 3 SECTION Z-Z: REMOVED DIM C3 - SHT 3 SECTION Z-Z: DIM 1.70 ±0.03 WAS 1.80 AELE-E-117783996-447			DATE: 090219 ( )	
D. DRUMMOND	C. SCHMID	G. LEECE		
D1 - REMOVED 9U5T-14421-CAA AELE-E-117783996-461			DATE: 090325 ( )	
D. DRUMMOND	C. SCHMID	G. LEECE		
E1 - UPDATED MODEL TO SHOW NEW POLARIZATION FEATURE AELE-E-117783996-494			DATE: 090903 ( )	
D. DRUMMOND	C. SCHMID	G. LEECE		
F1 RELEASED 9U5T-14421-ZA FOR PRODUCTION AUTHORITY F2 - REVISED NOTE 2; REMOVED NOTE 19 AND REMOVED NOTE 6 F3 - REVISED/ADDED COLUMN F4 - UPDATED TERMINAL & CRIMP TABLE AELE-E-117783996-474			DATE: 091222 ( )	
D. DRUMMOND	C. SCHMID	G. LEECE		
G1 - ADDED PROBING DETAIL VIEW AND NOTE AELE-E-117783996-764			DATE: 110329	
D. DRUMMOND	C. SCHMID	G. LEECE		
H1 - REVISED WIRE CODE COLUMN AELE-E-117783996-792			DATE: 110505	
D. DRUMMOND	C. SCHMID	G. LEECE		
J1 - ADDED DU5T-14421-FA J2 - UPDATED TABLES, SHT 1 J3 - ADDED NOTE 20 & 21 J4 - UPDATED CRIMP TABLES, SHT 2 J5 - RELEASED 9U5T-14421-CA FOR PRODUCTION AUTHORITY AELE-E-117783996-812			DATE: 111006	
D. DRUMMOND	C. SCHMID	G. LEECE		
K1 - TRANSITION AREA REVISED FOR IMPROVED BEND RESISTANCE ON 9U5T-14421-ZA ONLY. AELE-E-117783996-900			DATE: 120221	
D. DRUMMOND	C. SCHMID	K. LAZAR		

FORD PART NUMBER	TE PART NUMBER	DESCRIPTION	MATL SPEC	PLATING	C	D	AA	AB	APPROX WEIGHT	MATL THK	MAX TEMP	APPLICABLE WIRE SIZE				F3	F3	MATING PARTS		
												ESB-MIL123-A	WSB-MIL134-AI	ESB-MIL120-A	ISO WIRE SIZE	ES-AU5T-1A348-AA CODE 19	ES-BR33-1A348-AA CODE 19	FORD PART NO	SUPPLIER PART NO	DESCRIPTION
9U5T-14421-BA	1924275-1	0.64 MALE TERMINAL 20-22 AWG	C260	TIN	1.82	0.80	2.94	1.78	---	(0.20)	105°C	22 AWG	22 AWG	22 AWG	---	NA	NA	---	---	---
												---	---	0.35mm²	0.35mm²	2SAD, 2SAE H1	NA	---	---	---
												20 AWG	20 AWG	20 AWG	---	NA	NA	---	---	---
												---	---	0.50mm²	0.50mm²	2TAD, 2TAE	NA	---	---	---
9U5T-14421-CA	1924275-2	0.64 MALE TERMINAL 18 AWG	C260	TIN	1.96	1.00	2.94	1.78	---	(0.20)	105°C	18 AWG	18 AWG	18 AWG	---	NA	NA	---	---	---
												---	---	0.80mm²	0.80mm²	2TAD, 2TAE	NA	---	---	---
9U5T-14421-ZA	1924275-5	0.64 MALE TERMINAL 0.13mm²	C260	TIN	1.50	0.65	1.82	0.85	---	(0.20)	105°C	---	---	---	0.13mm² 20	NA	2UAY	---	---	---
J2 DU5T-14421-FA 21	1924275-6	0.64 FEMALE TERMINAL 2X 0.13mm² OR 0.35mm²	C260	TIN	1.50	0.80	2.40	1.40	---	(0.20)	105°C	---	---	---	2X 0.13mm² 0.35mm² 20	FOR 0.35mm² 2TAD, 2TAE, 2UAD, 2UAE 20	FOR 0.13mm² 2UAY 20	---	---	---

TERMINAL CRIMP & GRIP REFERENCE TABLE									
FORD PART NUMBER	F4 WIRE A5 F4 SPECIFICATION	CODE 19	WIRE SIZE (M=METRIC)	STRIP LENGTH (mm)	C.C.W. (mm)	C.C.H. (mm)	I.C.W. (mm)	I.C.H. (mm)	NOTES
9U5T-14421-BA	ESB-MIL123-A	NA	22 AWG	4.5-5.0	1.40±0.10	0.90±0.05	1.60±0.05	2.00±0.05	SEE NOTE 18
			20 AWG	4.5-5.0	1.40±0.10	0.95±0.05	1.60±0.05	2.20±0.05	
	WSB-MIL134-AI	NA	22 AWG	4.5-5.0	1.40±0.10	0.90±0.05	1.60±0.05	2.00±0.05	
			20 AWG	4.5-5.0	1.40±0.10	0.95±0.05	1.60±0.05	2.20±0.05	
	ESB-MIL120-A	NA	0.35 M 22 AWG	4.5-5.0	1.40±0.10	0.90±0.05	1.60±0.05	2.00±0.05	
			0.50 M 20 AWG	4.5-5.0	1.40±0.10	0.95±0.05	1.60±0.05	2.20±0.05	
9U5T-14421-CA	ESB-MIL123-A	NA	18 AWG	4.5-5.0	1.60±0.05	1.05±0.05	1.60±0.05	2.25±0.05	SEE NOTE 18
	WSB-MIL134-AI	NA	18 AWG	4.5-5.0	1.60±0.05	1.05±0.05	1.60±0.05	2.25±0.05	
	ESB-MIL120-A	NA	0.80 M 18 AWG	4.5-5.0	1.60±0.05	1.05±0.05	1.60±0.05	2.25±0.05	
9U5T-14421-ZA	ES-BR33-1A348-AA	2UAY	0.13 M 20	4.5-5.0	1.07±0.05	0.68±0.02	1.30±0.05	1.30±0.05	SEE NOTE 18
J2 DU5T-14421-FA 21	ES-BR33-1A348-AA	2UAY	2X 0.13 M 0.35 M 20	4.5-5.0 4.5-5.0	1.17±0.05 1.17±0.05	0.78±0.03 0.82±0.03	1.60±0.05 1.60±0.05	1.90±0.05 2.00±0.05	SEE NOTE 18

A1

REFERENCE		CPSC (180107)	
PART MUST COMPLY WITH MATERIAL SPECIFICATION WSS-M99P9999-A1 TO HELP SAFEGUARD HEALTH, SAFETY AND THE ENVIRONMENT			
DRAFTED IN ACCORDANCE WITH FORD MOTOR COMPANY ENGINEERING CAD AND DRAFTING STANDARDS CURRENT AT INITIAL RELEASE		3RD ANGLE PROJ DIMENSIONS ARE IN MILLIMETERS	
CAD TYPE PRO/E	CAD LOC. TE	CAD FILE 1924275_FORD K	DTMC IS MASTER
OPER. NO. N/A	UNIT N/A	DRAWING 9U5T-14421-BA	
DESIGN TE	DETAIL TE	TITLE TRMNL WIR SNP ON MALE	SHT 1 OF 4
CHECKED TE	SAFETY N/A		RH/LH N/A
SCALE NTS	DATE 060814	DIVISION PLANT	

PART NUMBER
J1 21 DU5T-14421-FA
F1 D1 A3 A2 9U5T-14421-ZA
J5 9U5T-14421-CA
9U5T-14421-BA

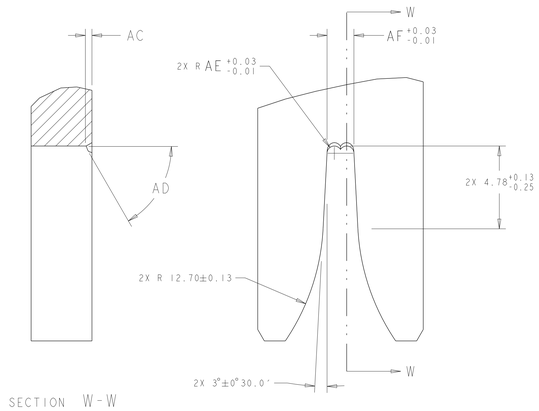
Ford Motor Company

DRW SIZE A0/E

Pro/ENGINEER DRAWING

CRIMPING TOOL DIMENSIONS - REF

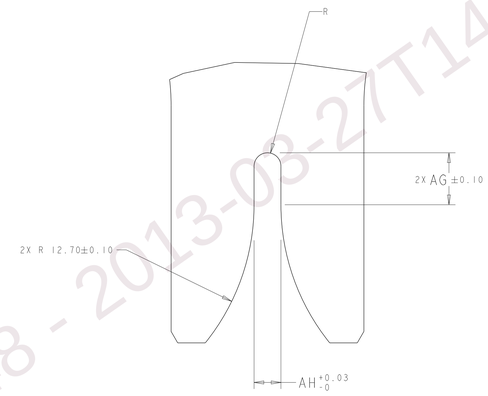
WIRE CRIMPER
SCALE 8:1



SECTION W-W

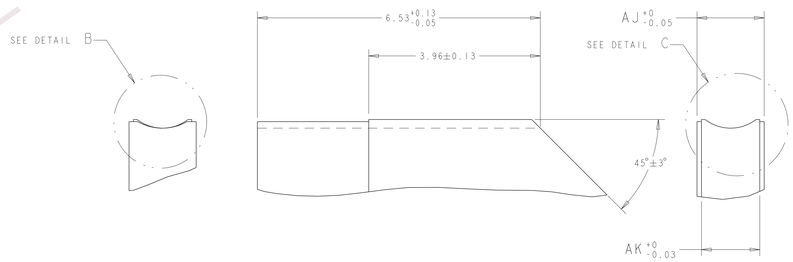
J4					
USCAR-21 TESTING NOT COMPLETED	0.13mm²	0.25	45°	0.29	1.07
	2X 0.13mm² OR 0.35mm²	0.25	60°	0.31	1.17
	20-22 AWG	0.38	60°	0.36	1.35
	18 AWG	0.38	60°	0.42	1.55
	WIRE SIZE	AC	AD	AE	AF

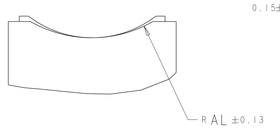
INSULATION CRIMPER
SCALE 8:1



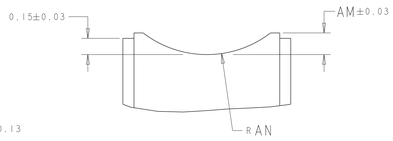
J4			
USCAR-21 TESTING NOT COMPLETED	0.13mm²	2.00	1.17
	2X 0.13mm² OR 0.35mm²	3.00	1.55
	20-22 AWG	3.00	1.55
	18 AWG	3.00	1.55
	WIRE SIZE	AG	AH

ANVIL
SCALE 20:1





DETAIL B
SCALE 50:1



DETAIL C
SCALE 50:1

J4						
USCAR-21 TESTING NOT COMPLETED	0.13mm²	1.17	1.07	0.53	0.10	0.64
	2X 0.13mm² OR 0.35mm²	1.55	1.17	1.14	0.25	0.58
	20-22 AWG	1.55	1.35	1.14	0.20	0.96
	18 AWG	1.55	1.55	1.14	0.20	1.14
	WIRE SIZE	AJ	AK	AL	AM	AN

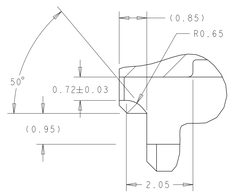
A1

DRAWING	9U5T-14421-BA	REV K	SHT 2 OF 4
CAD FILE	1924275_FORD	Ford Motor Company	

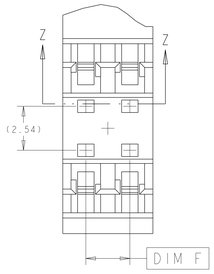
DRW SIZE A0/E

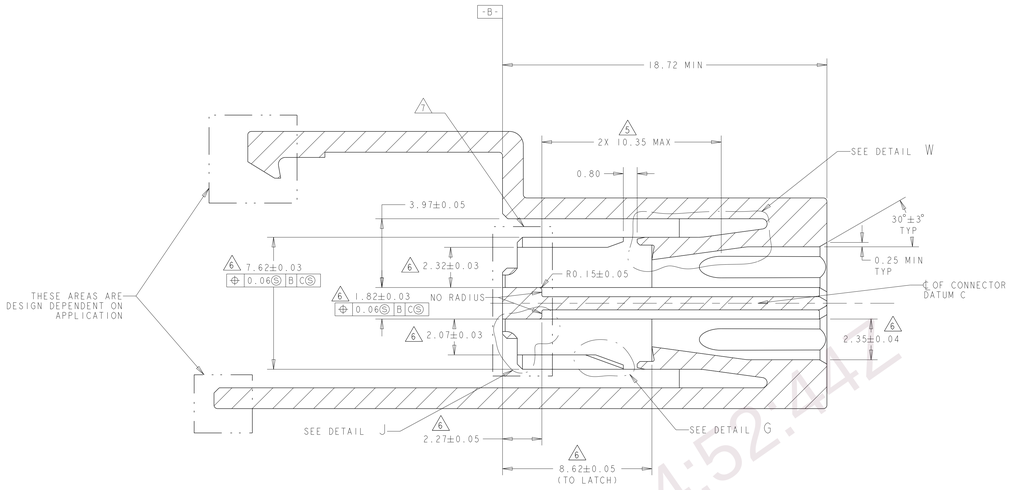
0.64mm MALE CAVITY DETAIL
SCALE 8:1

2.20	2.20	1.89
2.54	2.54	2.12
CENTERLINE SPACING	F	E

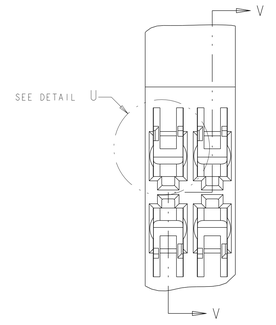


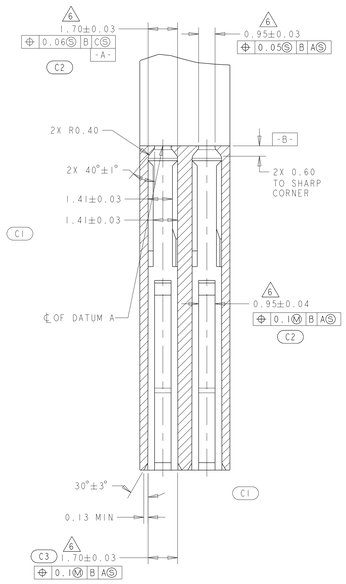
DETAIL J
SCALE 15:1



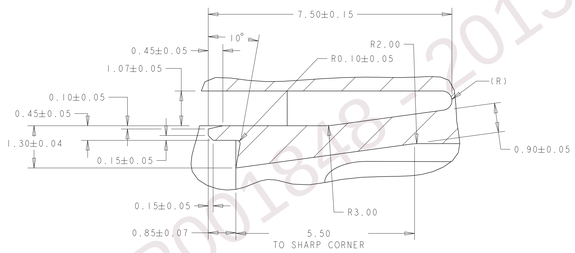


SECTION V-V
TYPICAL

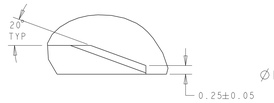




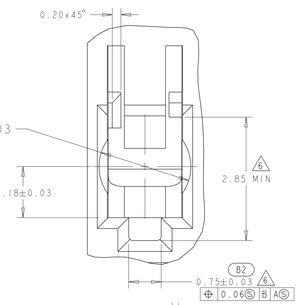
SECTION Z-Z



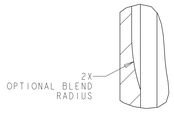
DETAIL W
SCALE 15:1
TYPICAL



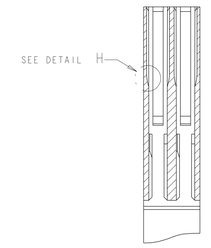
DETAIL G
SCALE 16:1



DETAIL U
SCALE 20:1
TYPICAL



DETAIL H
SCALE 20:1



SECTION X-X
SCALE 5:1

NOTES:
1. BY USING ANY INFORMATION CONTAINED IN THIS DRAWING (TYCO ELECTRONICS INFORMATION), THE USER AGREES TO THE FOLLOWING:
   - A: USING TYCO ELECTRONICS INFORMATION SHOWN IN THE DRAWING FOR ANY PURPOSE OTHER THAN CAVITY DESIGN IS PROHIBITED.
   - B: ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY ARE EXPRESSLY DISCLAIMED AND EXCLUDED. THE ENTIRE RISK AS TO THE RESULT OBTAINED BY USING THE TYCO ELECTRONICS INFORMATION IS ASSUMED BY THE USER.
   - C: TYCO ELECTRONICS SHALL NOT BE LIABLE FOR ANY LOSS OR INJURY TO EARNINGS, PROFITS, GOODWILL, OR ANY PUNITIVE, EXEMPLARY, DIRECT CLAIM, SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES.
   - D: THE USER OF THE TYCO ELECTRONICS INFORMATION AGREES TO DEFEND, INDEMNIFY, AND HOLD HARMLESS TYCO ELECTRONICS AND ITS AFFLIATED ENTITIES, RESPECTIVE OFFICERS, EMPLOYEES AND AGENTS FROM ANY AND ALL CLAIMS, COSTS, EXPENSES, DAMAGES, JUDGMENTS, OR OTHER LOSSES INCLUDING THE COST OF INVESTIGATION AND LITIGATION AND REASONABLE ATTORNEY'S FEES ARAISING OUT OF THE USE OF THE TYCO ELECTRONICS INFORMATION.
   - E: USER IS RESPONSIBLE FOR ANY SPECIFIC APPLICATION OF THE TYCO ELECTRONICS INFORMATION
2. MANUFACTURER RECOMMENDS USE OF TYCO ELECTRONICS SUPPLIED TERMINALS WITH THE CAVITY DESIGN SHOWN IN DRAWING.
3. TYCO ELECTRONICS INFORMATION CANNOT BE USED BY ANY PERSON OR ENITY FOR ANY PURPOSE OTHER THAN FORD APPLICATIONS.
4. ANY USE OF THE INFORMATION SHOWN ON THE DRAWING REQUIRES THE PRIOR WRITTEN CONSENT OF TYCO ELECTRONICS OR FORD MOTOR COMPANY.

CAVITY DETAIL NOTES

1. CAVITY DESIGN SHOWN IS BASED ON THE UTILIZATION OF A SPECIFIC MATERIAL(NYLON 6/6 35% GLASS FILLED). USER OF THIS THIS CAVITY DESIGN IS RESPONSIBLE FOR ANY NECESSARY MODIFICATIONS NECESSARY FOR A SPECIFIC APPLICATION OR MATERIAL.
2. UNLESS SPECIFIED ALL RADIUS TO BE 0.30 MIN
3. GENERAL TOLERANCES, ±0.10 ALL TWO PLACES DIMENSIONS, ±0°30' ON ALL ANGULAR DIMENSIONS).
4. UNDIMENSIONED FEATURES ARE AT THE DISCRETION OF THE COMPONENT DESIGNER

5 TO FULL DIAMETER

6 NOTED DIMENSIONS ARE CONSIDERED NECESSARY FOR PROPER PART FUNCTION (11X). OTHER DIMENSIONS ARE CONSIDERED AS REFERENCE AND MAY NEED TO VARY BASED ON SPECIFIC APPLICATIONS AND REQUIREMENTS

1 THIS AREA DESIGN DEPENDENT ON ALIGNMENT PLATE. ALIGNMENT PLATE RECOMMENDED FOR LARGE CIRCUIT CONNECTORS.

A1

DRAWING	9U5T-14421-BA	REV K	SHT 3 OF 4
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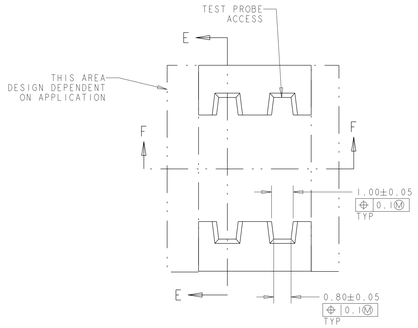
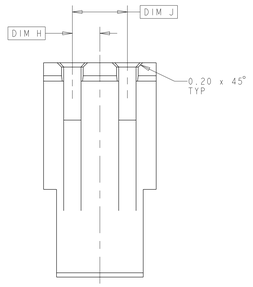
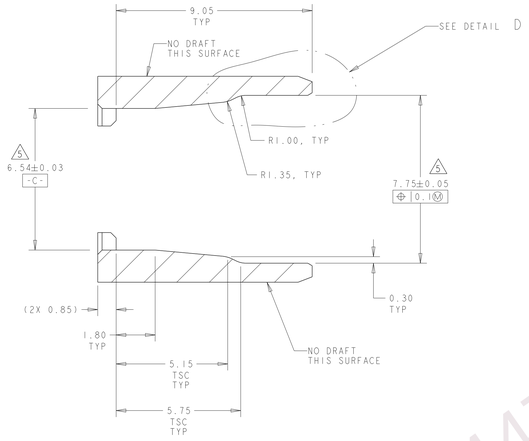
DRW SIZE A0/E

TPA DETAIL
SCALE 10:1

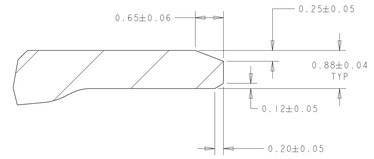




SECTION F-F



SECTION E-E



DETAIL D
SCALE 20:1
TYPICAL

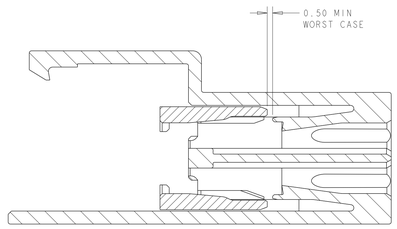
2.20	1.10	2.20
2.54	1.27	2.54
CENTERLINE SPACING	H	J

TPA DETAIL NOTES

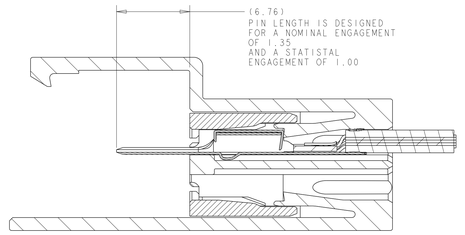
1. TPA DESIGN SHOWN IS BASED ON THE UTILIZATION OF A SPECIFIC MATERIAL (NYLON 6/6, 35% GLASS FILLED). USER OF THIS THIS CAVITY DESIGN IS RESPONSIBLE FOR ANY NECESSARY MODIFICATIONS NECESSARY FOR A SPECIFIC APPLICATION OR MATERIAL.
2. UNLESS SPECIFIED ALL RADIUS TO BE 0.20±0.10
3. GENERAL TOLERANCES, ±0.10 ALL TWO PLACES DIMENSIONS, ±0°30′ ON ALL ANGULAR DIMENSIONS
4. UNDIMENSIONED FEATURES ARE AT THE DISCRETION OF THE COMPONENT DESIGNER

5 NOTED DIMENSIONS ARE CONSIDERED NECESSARY FOR PROPER PART FUNCTION (2X). OTHER DIMENSIONS ARE CONSIDERED AS REFERENCE AND MAY NEED TO VARY BASED ON SPECIFIC APPLICATIONS AND REQUIREMENTS

ASSEMBLY DETAIL



SECTION T-T
TPA SHOWN
IN PRESET POSITION
SCALE 5:1



SECTION T-T
TPA SHOWN
FULLY SEATED
SCALE 5:1

A1

DRAWING	9U5T-14421-BA	REV K	SHT 4 OF 4
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DRW SIZE A0/E