

Excellent Integrated System Limited

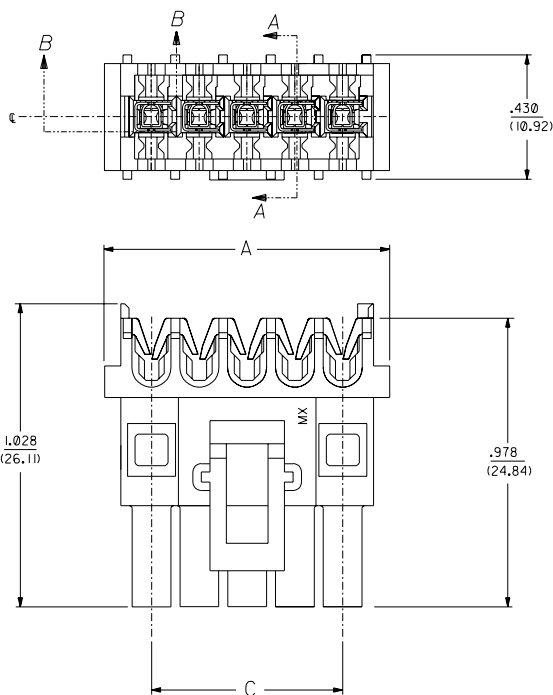
Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

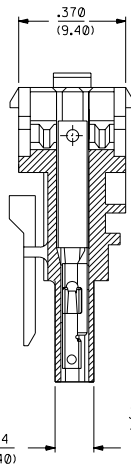
[Molex Connector Corporation](#)
[71694-1001](#)

For any questions, you can email us directly:

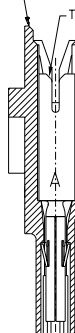
sales@integrated-circuit.com



HOUSING MATERIAL: 94V-0
UNFILLED POLYESTER
MATERIAL COLOR: WHITE

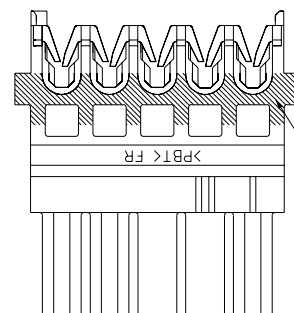


SECTION A-A



SECTION B-B

TERMINAL MATERIAL: PHOSPHOR BRONZE



SEE NOTE 9

NOTES:

1. ASSEMBLY NO. 71694-15** SHOWN FOR ILLUSTRATION.
2. MATES WITH PART NUMBER 71690-****.
3. SEE FOLLOWING PAGES FOR PART NUMBERS AND THEIR CONFIGURATIONS.
4. FINISHES (SEE CHART):
TIN OVERALL - .000100/(0.00254) MINIMUM TIN OVERALL, OVER NICKEL UNDERPLATING OVERALL.
15 GOLD - .000015/(0.00038) MINIMUM SELECT GOLD AND .000150/(0.00380) MINIMUM SELECT TIN OVER NICKEL UNDERPLATING OVERALL.
5. ITEM NOS. PRECEDED BY AN 'X' IN THE CHART ARE NOT AVAILABLE.
6. RECOMMENDED FOR USE WITH UL STYLE # 1007 WIRE.
7. PART CONFORMS TO SPECIFICATION NO. PS-71690-001.
8. MATERIAL RECYCLING LOGO TO BE LOCATED ON SIDE OF PART.
9. IDT SLOT IDENTIFIER COLOR STRIPE TO BE LOCATED ON THIS SURFACE. ID PER CHART BELOW.

WIRE GAUGE	ID COLOR
18	FLRSCNT MAGENTA
20	BLUE
22	GREEN
24	BLACK

10. OPTIONAL COVER NUMBERS: 71161-**01 (FEED THRU) OR -**02 (FEED TO VERSION).
11. SEE SMES-71690-0000 FOR TERMINATION SPECIFICATIONS.
12. PACKAGE PER PK-71690-0000.

NOTE FOR LEAD FREE CONVERSION:

THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO ROHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH LEAD.

N	LEAD FREE CONV ECN UCP2004-2042 ADAMS 84/04/21
M	CHANGE PROD SPEC ECN UDT2001-0195 KMS 9/22/2000
L	ADD 6 CKT MIXED UDT2000-0266 RFOX 99/9/15
K	ADD .010 MAX RADIUS UDT1999-0448 KMS 99/12/15
J	ADD VOIDS, MIXED AWG UDT1999-0370 SCHAFFER 98/11/11
II	CUST 25 NO STRIPE PER ECN U00368 ELO 97/7/25
I	ADD CUSTOM COLOR PER ECN U71576 ELO 97/6/16
H	MAT'L COLOR CHANGE PER ECN U71026 ELO 97/2/26
G	18 AWG CLR CHANGE PER ECN U70413 ELO 10/23/96
5	N
4	N
3	N
2	N
1	N

MFG.	SH.	REV.	LTR.	REVISIONS
------	-----	------	------	-----------

DIMENSIONS SHOWN (METRIC) INCH

UNLESS OTHERWISE SPECIFIED

TOLERANCES: ANGULAR ± 1/2°

± PLACE ± .010 ---

± PLACE ± .014 ± 0.25

± PLACE --- ± 0.36

DRAFT: WHERE APPLICABLE MUST

REMAIN WITHIN DIMENSIONS

DRG. BY: RWB CHK'D BY: SAS

APP'D BY: SCALE 4:1

REVISIONS ONLY ON CAD SYSTEM

MINI-FIT IDT SINGLE ROW RECEPTACLE SALES ASSEMBLY

MOLEX INCORPORATED SHEET NO. DATE

SEE CHART SDA-71694-****

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. TC

13													12													11													10													9													8													7													6													5													4													3													2													1												
J													I													H													G													F													E													D													C													B													A																																																			
CTK SIZE													ASSEMBLY ITEM NUMBER													WIRE AWG													WIRE DESCRIPTION													DIMENSION A													DIMENSION B													DIMENSION C													PLATING SEE NOTE 4																																																																													
																																																				INCH (MM)													INCH (MM)													INCH (MM)																																																																																										
2													71694-1001													18													SOLID,FUSED, STRANDED													.490 (12.45)													0.378 (9.60)													0.1654 (4.20)													TIN OVERALL																																																																													
2													71694-1003													20																										.490 (12.45)													0.378 (9.60)													0.1654 (4.20)																																																																																										
2													71694-1004													22																										.490 (12.45)													0.378 (9.60)													0.1654 (4.20)																																																																																										
2													71694-1005													24																										.490 (12.45)													0.378 (9.60)													0.1654 (4.20)																																																																																										
2													71694-1007													18																										.490 (12.45)													0.378 (9.60)													0.1654 (4.20)													I5 GOLD																																																																													
2													71694-1009													20																										.490 (12.45)													0.378 (9.60)													0.1654 (4.20)																																																																																										
2													71694-1010													22																										.490 (12.45)													0.378 (9.60)													0.1654 (4.20)																																																																																										
2													71694-1011													24																										.490 (12.45)													0.378 (9.60)													0.1654 (4.20)																																																																																										
3													71694-1101													18																										.655 (16.65)													0.543 (13.80)													0.3308 (8.40)													TIN OVERALL																																																																													
3													71694-1103													20																										.655 (16.65)													0.543 (13.80)													0.3308 (8.40)																																																																																										
3													71694-1104													22																										.655 (16.65)													0.543 (13.80)													0.3308 (8.40)																																																																																										
3													71694-1105													24																										.655 (16.65)													0.543 (13.80)													0.3308 (8.40)																																																																																										
3													71694-1107													18																										.655 (16.65)													0.543 (13.80)													0.3308 (8.40)													I5 GOLD																																																																													
3													71694-1109													20																										.655 (16.65)													0.543 (13.80)													0.3308 (8.40)																																																																																										
3													71694-1110													22																										.655 (16.65)													0.543 (13.80)													0.3308 (8.40)																																																																																										
3													71694-1111													24																										.655 (16.65)													0.543 (13.80)													0.3308 (8.40)																																																																																										
4													71694-1301													18																										.821 (20.85)													0.709 (18.00)													0.4962 (12.60)													TIN OVERALL																																																																													
4													71694-1303													20																										.821 (20.85)													0.709 (18.00)													0.4962 (12.60)																																																																																										
4													71694-1304													22																										.821 (20.85)													0.709 (18.00)													0.4962 (12.60)																																																																																										
4													71694-1305													24																										.821 (20.85)													0.709 (18.00)													0.4962 (12.60)																																																																																										
4													71694-1307													18																										.821 (20.85)													0.709 (18.00)													0.4962 (12.60)													I5 GOLD																																																																													
4													71694-1309													20																										.821 (20.85)													0.709 (18.00)													0.4962 (12.60)																																																																																										
4													71694-1310													22																										.821 (20.85)													0.709 (18.00)													0.4962 (12.60)																																																																																										
4													71694-1311													24																										.821 (20.85)													0.709 (18.00)													0.4962 (12.60)																																																																																										
5													71694-1501													18																										.986 (25.05)													0.874 (22.20)													0.6616 (16.80)													TIN OVERALL																																																																													
5													71694-1503													20																										.986 (25.05)													0.874 (22.20)													0.6616 (16.80)																																																																																										
5													71694-1504													22																										.986 (25.05)													0.874 (22.20)													0.6616 (16.80)																																																																																										
5													71694-1505													24																										.986 (25.05)													0.874 (22.20)													0.6616 (16.80)																																																																																										
5													71694-1507													18																										.986 (25.05)													0.874 (22.20)													0.6616 (16.80)													I5 GOLD																																																																													
5													71694-1509													20																										.986 (25.05)													0.874 (22.20)													0.6616 (16.80)																																																																																										
5													71694-1510													22																										.986 (25.05)													0.874 (22.20)													0.6616 (16.80)																																																																																										
5													71694-1511													24																										.986 (25.05)													0.874 (22.20)													0.6616 (16.80)																																																																																										
6													71694-1701													18																										1.152 (29.25)													1.039 (26.40)													0.8270 (21.00)													TIN OVERALL																																																																													
6													71694-1703													20																										1.152 (29.25)													1.039 (26.40)													0.8270 (21.00)																																																																																										
6													71694-1704													22																										1.152 (29.25)													1.039 (26.40)													0.8270 (21.00)																																																																																										
6													71694-1705													24																										1.152 (29.25)													1.039 (26.40)													0.8270 (21.00)																																																																																										
6													71694-1707													18																										1.152 (29.25)													1.039 (26.40)													0.8270 (21.00)													I5 GOLD																																																																													
6													71694-1709													20																										1.152 (29.25)													1.039 (26.40)													0.8270 (21.00)																																																																																										
6													71694-1710													22																										1.152 (29.25)													1.039 (26.40)													0.8270 (21.00)																																																																																										
6													71694-1711													24													SOLID, FUSED, STRANDED													1.152 (29.25)													1.039 (26.40)													0.8270 (21.00)																																																																																										

POLARIZATION SCHEMES

12 CKT

11 CKT

10 CKT

9 CKT

8 CKT

7 CKT

6 CKT

5 CKT

4 CKT

3 CKT

2 CKT

A

B

C

MFG.

SH.

REV.

LTR.

REVISIONS

DIMENSIONS SHOWN (METRIC) INCH

(UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR ± 1/2°)

3 PLACE ± .010

2 PLACE ± .014

1 PLACE ± .036

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DRWG. BY RWB

CHKD. BY SAS

APPD. BY

SCALE 1

TITLE

MINI-FIT IDT SINGLE ROW RECEPTACLE SALES ASSEMBLY

SEE CHART

SDA-71694-****

PART NO. 60532

DATE 01/28/93

FILE NAME 571694X2

REV. 1

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.

REV. 1

TC

WIRE TERMINATION SPECIFICATION

- 1.0 APPLICABLE DRAWINGS:
THIS SPECIFICATION APPLIES TO A-71690 AND A-71694 SERIES OF INSULATION DISPLACEMENT CONNECTORS.
- 2.0 SCOPE:
THIS SPECIFICATION IS DESIGNED TO INSURE THE PROPER TERMINATION AND PERFORMANCE OF THE A-71690 AND A-71694 SERIES OF INSULATION DISPLACEMENT CONNECTORS.
- 3.0 GENERAL:
THE .1654/(4.20) CENTER INSULATION DISPLACEMENT CONNECTOR SYSTEM IS DESIGNED TO INTERCONNECT DISCRETE WIRE AS OUTLINED IN THIS SPECIFICATION.

4.0 CONDUCTOR REQUIREMENTS:
4.1 CONDUCTOR SIZE IDENTIFICATION:

CONDUCTOR SIZE	CONDUCTOR STYLE	HOUSING ID COLOR (SEE FIG. 4)	TERMINAL ID HOLE POSITION (SEE FIG.8; SHT.5)
18 AWG	STRANDED WITH TOPCOAT,FUSED, SOLID	RED	POSITION 1
20 AWG	STRANDED WITH TOPCOAT,FUSED, SOLID	BLUE	POSITION 2
22 AWG	STRANDED WITH TOPCOAT,FUSED, SOLID	GREEN	POSITION 3
24 AWG	STRANDED WITH TOPCOAT,FUSED, SOLID	BLACK	POSITION 4

RECOMMENDED UL STYLE: 1007, 1061

- 4.2 INSULATION REQUIREMENTS:
INSULATION DIAMETER: .090 MAX
INSULATION HARDNESS: 85 MAX ON THE SHORE A SCALE

5.0 TERMINATION REQUIREMENTS:

5.1 CABLE INSERTION DEPTH:

THE CABLE SHOULD BE INSERTED TO DEPTH OF .140/(3.56)* FROM THE TOP OF THE HOUSING TO THE TOP OF THE WIRE (SEE FIGURE 2). WIRE MUST BE LOCATED BELOW THE BOTTOM OF EAGLES.

- * TERMINATION DEPTH FOR THE 24 AWG WIRES IN THE FOLLOWING ASSEMBLIES TO BE .138±.005/(3.51±0.13); 71690-6008 AND 71694-2402.

STRAIN RELIEF

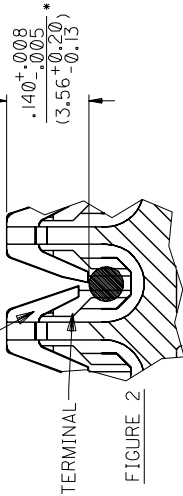


FIGURE 2

REV.	B	A	B	B	B
SHT.	1	2	3	4	5

FILE NAME

T71690X1

REVISION ONLY ON CAD SYSTEM

REV.

B

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.



WIRE TERMINATION SPECIFICATION

5.2 WIRE CUT OFF

IN THE FEED-TO VERSION THE WIRE MUST BE DISPLACED IN BOTH INSULATION DISPLACEMENT SLOTS AND MUST PROTRUDE THROUGH THE SECONDARY SLOT BY $(1.52) \pm .060$ MIN. AS SHOWN IN FIGURE 3.

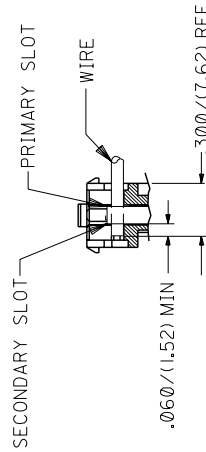


FIGURE 3

5.3 HORIZONTAL PULL OUT FORCE

THE CONNECTOR MUST MAINTAIN THE FOLLOWING MIN. PULL OUT VALUES WHEN A FORCE IS APPLIED AT A RATE OF 1 INCH PER MINUTE TO THE CABLE IN A DIRECTION PERPENDICULAR TO THE INSULATION DISPLACEMENT SECTION, AS SHOWN IN FIGURE 4. (NOTE CABLE MUST BE SLIT TO FORM INDIVIDUAL CONDUCTORS AFTER TERMINATION BUT PRIOR TO TESTING).

AWG	PULL FORCE
18 AWG	14.0 LBS. MIN.
20 AWG	TBD
22 AWG	TBD
24 AWG	8.0 LBS. MIN.

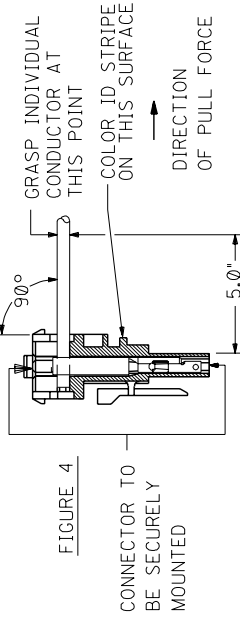


FIGURE 4

5.4 VERTICAL PULL OUT FORCE

THE CONNECTOR MUST MAINTAIN THE FOLLOWING MIN. PULL OUT VALUES WHEN A FORCE IS APPLIED AT A RATE OF 1 INCH PER MINUTE TO THE CABLE IN A DIRECTION PARALLEL TO THE INSULATION DISPLACEMENT SECTION, AS SHOWN IN FIGURE 5. (NOTE CABLE MUST BE SLIT TO FORM INDIVIDUAL CONDUCTORS AFTER TERMINATION BUT PRIOR TO TESTING).

AWG	PULL FORCE
18 AWG	5.0 LBS. MIN.
20 AWG	TBD
22 AWG	TBD
24 AWG	2.4 LBS. MIN.

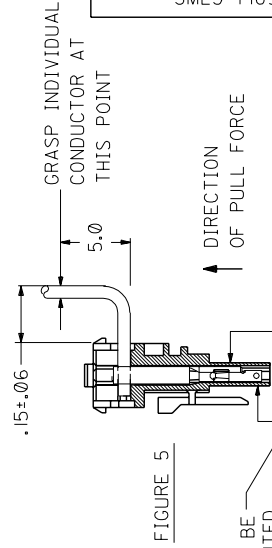


FIGURE 5

DRWG. NO. SMES-71690-0000

DRWG. NO. SMES-71690-0000

REV.
SHT.

FILE NAME
T71690X2

REVISIONS

REVISE ONLY ON CAD SYSTEM

REV.

A

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.

SHT.

2



MOLEX INCORPORATED
LISLE, ILL. 60532 U.S.A.



WIRE TERMINATION SPECIFICATION

5.5 TORSIONAL RESISTANCE:

CONNECTOR MUST WITHSTAND A MAXIMUM TWIST ON A TERMINATED CABLE OF 130° WITHOUT DISTURBING THE INSULATION DISPLACEMENT INTERFACE IN THE PRIMARY OR SECONDARY SLOTS (SEE FIGURE 3) (NOTE CABLE MUST BE SLIT TO FORM INDIVIDUAL CONDUCTORS AFTER TERMINATION BUT PRIOR TO TESTING).

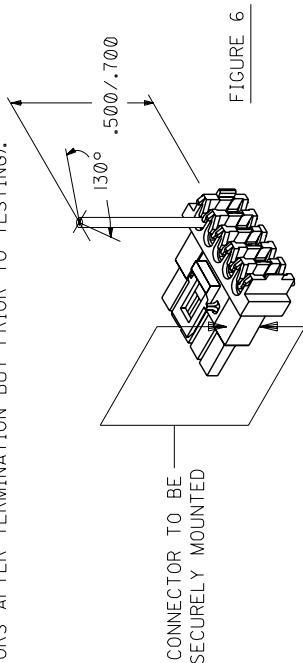


FIGURE 6

5.6 VISUAL INSPECTION:

AFTER TERMINATION, INSULATION DISPLACEMENT SECTION OF THE TERMINAL TO BE FREE OF TOOL MARKS FROM TERMINATION EQUIPMENT.

6.0 TERMINATION EVALUATION PROCEDURE:

STEP 1 -STRAIN RELIEF REMOVAL

REMOVE SHADED PORTION OF THE STRAIN RELIEF USING A RAZOR BLADE

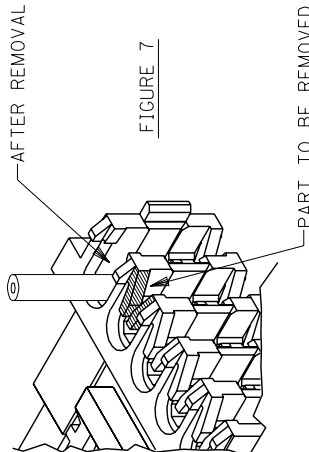


FIGURE 7

STEP 2 -REMOVAL OF TERMINAL

INSERT THE REMOVAL TOOL(HT60630A) INTO THE FRONT OF OF THE CONNECTOR (AROUND THE TERMINAL) TO DEPRESS LOCK TANGS. PUSH THE TERMINAL/WIRE OUT THE BACK OF THE CONNECTOR.

DRWG. NO. SMES-71690-0000

DRWG. NO. SMES-71690-0000

REV.

SHT.

FILE NAME
T71690X3

▽ = 0 ▲ = 0

REVISE ONLY ON CAD SYSTEM

REV.

B

SHT.

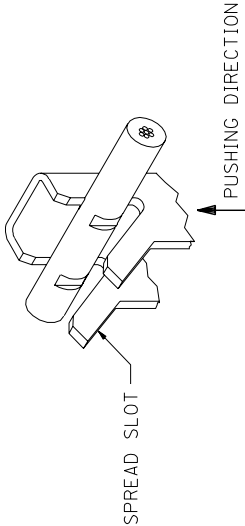
3

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.

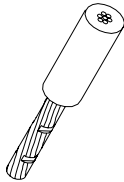
MOLEX INCORPORATED
LISLE, ILL. 60532 U.S.A.

WIRE TERMINATION SPECIFICATION

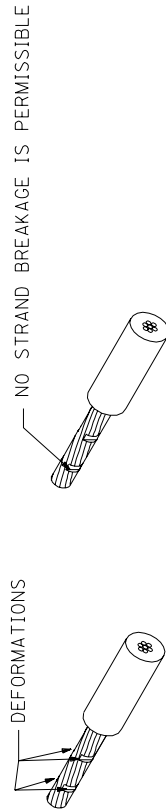
STEP 3 -CONDUCTOR REMOVAL
USING A SMALL PAIR OF PLIERS SPREAD THE I.D.T. SLOT
AND REMOVE CONDUCTOR BY PUSHING IN DIRECTION SHOWN



STEP 4 -REMOVING INSULATION
INSULATION TO BE REMOVED WITHOUT DISTURBING I.D.T. AREA



STEP 5 -CONDUCTOR INSPECTION
FOUR DEFORMATION POINTS MUST BE CLEARLY VISIBLE WHEN
USING 10X MAGNIFICATION



DRWG. NO. SMES-71690-0000

REV.
SHT.

FILE NAME
T71690X4

REVISIONS
0 = 0

REVISE ONLY ON CAD SYSTEM

REV. B

SHT. 4

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.

DRWG. NO. SMES-71690-0000

moLEX

LISLE, ILL. 60532 U.S.A.

WIRE TERMINATION SPECIFICATION

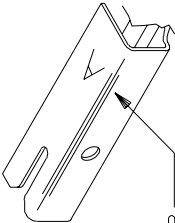
LTR.	REVISIONS
A	RELEASED PER ECR U51189 09/15/95 sas
B	UPDATED PER ECR U70308 ELO 09/20/96

STEP 1 -REMOVAL OF TERMINAL

INSERT THE REMOVAL TOOL(*HT60630A) INTO THE FRONT OF
OF THE CONNECTOR (AROUND THE TERMINAL) TO DEPRESS LOCK TANGS.
PUSH THE TERMINAL/WIRE OUT THE BACK OF THE CONNECTOR.

STEP 2 -WIRE GAGE PER CHART

ID LETTER	WIRE GAGE
D	18 AWG
C	20 AWG
B	22 AWG
A	24 AWG



ID LETTER

FIGURE 8

DRWG. NO. SMES-71690-0000

DRWG. NO. SMES-71690-0000

REV.
SHT.

FILE NAME
T71690X5

▽ = 0 ▴ = 0

REVISE ONLY ON CAD SYSTEM

REV.

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO
MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.

SHT.

5