

FEATURES AND SPECIFICATIONS

Features and Benefits

- Meets UL 1086 Section 8 Electrical Probe and UL 1863 Section 20 Childs Finger Test
- No exposed leads to meet British Telecom 4000V test
- Contact tips guided within FCC-specified target zone—Positive alignment prevents shorting
- 100% tested for hi-pot and continuity
- .500" height is industry lowest

Reference Information

Product Specification: PS-42410
 Packaging: Tray
 UL File No.: E107635
 CSA File No.: LR19980
 Mates With: WE Co. and FCC 68 plugs
 Designed In: Inches

Electrical

Voltage: 125V
 Current: 1.5A
 Contact Resistance: 10mΩ max.
 Dielectric Withstanding Voltage: 1000V AC rms
 Insulation Resistance: 500 MΩ min.

Mechanical

Durability: 500 cycles min.

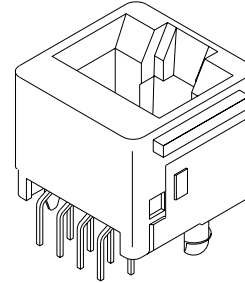
Physical

Housing: Black glass-filled polyester, UL 94V-0
 Contact: Phosphor Bronze
 Plating: 1.27μm (50μ") min. Gold in contact area and 1.27μm (50μ") Tin/Lead on solder tails both over Nickel overall
 Operating Temperature: -40 to +80°C

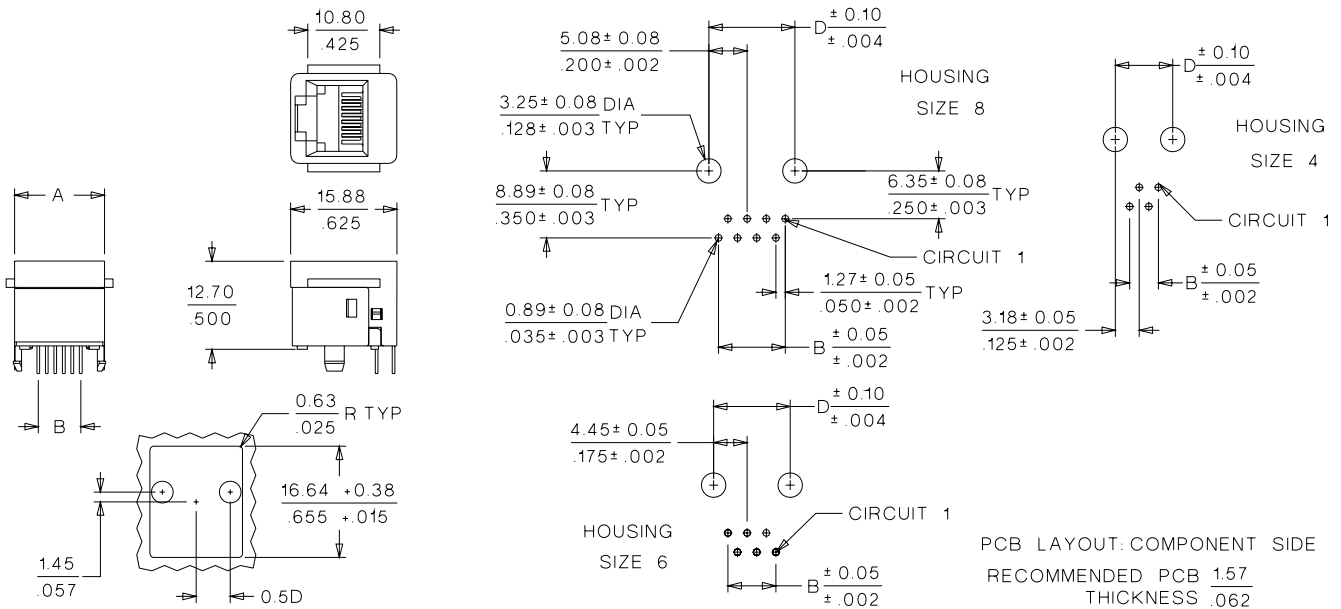


42878

Vertical, Low Profile For .062" and .125" PCB



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.				Dimension		
		.062" PCB		.125" PCB		A	B	D
		Flush Mount	Flangeless	Flush Mount	Flangeless			
4	2	42878-4360	42878-4362	42878-4408	42878-4410	11.43 (.450)	1.27 (.050)	7.62 (.300)
4	4	42878-4216	42878-4218	42878-4264	42878-4266	11.43 (.450)	3.81 (.150)	7.62 (.300)
6	2	42878-6504	42878-6506	42878-6552	42878-6554	13.20 (.520)	1.27 (.050)	10.16 (.400)
6	4	42878-6360	42878-6362	42878-6408	42878-6410	13.20 (.520)	3.81 (.150)	10.16 (.400)
6	6	42878-6216	42878-6218	42878-6264	42878-6266	13.20 (.520)	6.35 (.250)	10.16 (.400)
8	2	42878-9272	42878-9274	42878-9368	42878-9370	15.20 (.600)	1.27 (.050)	11.43 (.450)
8	4	42878-8984	42878-8986	42878-9080	42878-9082	15.20 (.600)	3.81 (.150)	11.43 (.450)
8	6	42878-8696	42878-8698	42878-8792	42878-8794	15.20 (.600)	6.35 (.250)	11.43 (.450)
8	8	42878-8408	42878-8410	42878-8504	42878-8506	15.20 (.600)	8.89 (.350)	11.43 (.450)

Note: Contact Molex for keying order numbers RJ-45 only

Modular Plugs and Jacks



MODULAR JACK CHARACTERISTICS LEGEND

EXTERNAL CONNECTOR BODY DIMENSIONS: (SEE NOTES 8 AND 9)
 JACKS ARE AVAILABLE IN STANDARD 4, 6, AND 8 POSITION BODY SIZES

NUMBER OF CONTACT POSITIONS:
 CONNECTOR SIZE 4 CAN ACCOMMODATE 2 OR 4 TERMINALS;
 CONNECTOR SIZE 6 CAN ACCOMMODATE 2, 4, OR 6 TERMINALS;
 CONNECTOR SIZE 8 CAN ACCOMMODATE 2, 4, 6, 8, OR 10 TERMINALS

POLARIZATION OPTION:
 NO = JACKS WITHOUT KEYING SLOT
 YES = JACKS WITH KEYING SLOT (AVAILABLE ON CONNECTOR SIZE 8 ONLY)

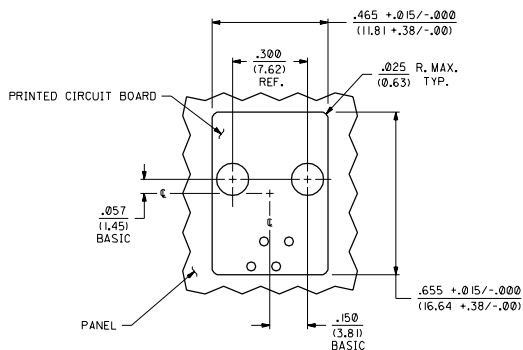
MOUNTING EARS OPTION:
 YES = JACKS WITH MOUNTING EARS
 NO = JACKS WITHOUT MOUNTING EARS

NOTES:

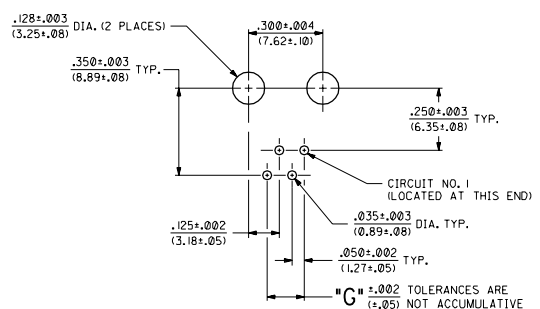
- MATERIALS: HOUSING- POLYESTER, GLASS FILLED, UL94V-0, COLOR - BLACK
 TERMINALS- PHOSPHOR BRONZE ALLOY, .015/(0.38) THICK.
- TERMINAL PLATING:
 .000050/(.00127) MIN. GOLD IN CONTACT AREA, .000050/(.00127) MIN. TIN-
 LEAD ON P.C. TAILS, AND .000050/(.00127) MIN. NICKEL UNDERPLATE OVERALL.
- THESE MODULAR JACKS MEET THE PERFORMANCE REQUIREMENTS OF MOLEX PRODUCT SPECIFICATION PS-42878.
- ALL JACKS ARE DESIGNED TO BE USED WITH .062/(1.57) OR .125/(3.18) THICK P.C. BOARDS.
- ALL JACKS CONFORM TO AND ACCEPT PLUGS WHICH CONFORM TO FCC RULES AND REGULATIONS PART 6B, SUBPART F.
- ALL JACKS MUST BE CAPABLE OF FITTING INTO MOLEX GAGE G-42878 (CONNECTOR SIZE 4).
- ALL UNTOLERANCED DIMENSIONS ARE SHOWN FOR REFERENCE ONLY.
- SEE SHEET 2 & 4 FOR CONNECTOR SIZE 6.
- SEE SHEETS 3 & 5 FOR CONNECTOR SIZE 8.
- CONNECTORS ARE SHIPPED IN THERMOFORMED TRAYS, PER PACKAGING SPECIFICATION PK-42878-492.
- THIS MODULAR JACK ASSEMBLY IS ALSO AVAILABLE IN A HIGH TEMPERATURE MATERIAL. (SEE MOLEX DRAWING SDA-43579-*****)
- ENGRAVED NUMBERS ON HOUSING BODY ARE FOR MOLDING IDENTIFICATION ONLY. THEY ARE NOT INTENDED FOR ASSEMBLY IDENTIFICATION PURPOSES.

P. C. BOARD THICKNESS	DIM. "D" (MTG. PEGS)	DIM. "F" (P.C. TAILS)
.062(1.57)	.128 (3.25)	.120 +.015/-.025 (3.05 +.38/-.63)
.125(3.18)	.191 (4.85)	.205 +.015/-.025 (5.21 +.38/-.63)

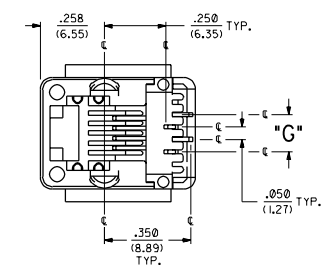
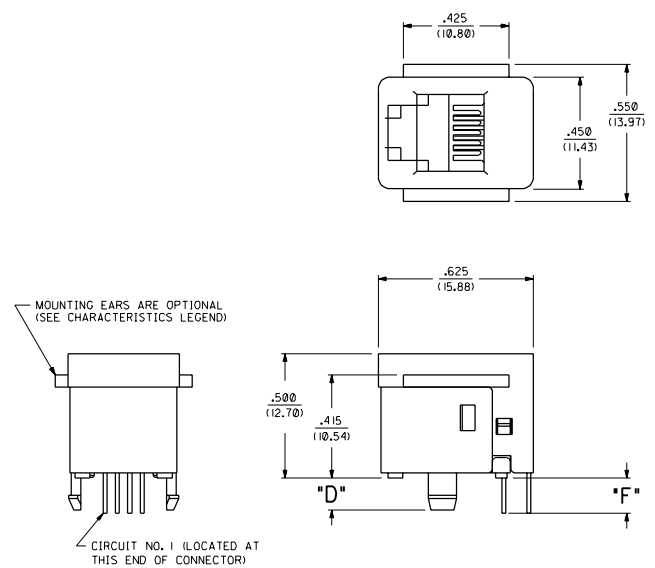
CONNECTOR SIZE	CIRCUIT SIZE	DIM. "G"
4	4	.150 (3.81)
4	2	.050 (1.27)



PANEL CUT-OUT FOR CONNECTOR SIZE 4



P.C. BOARD LAYOUT FOR CONNECTOR SIZE 4



SIZE 4 MODULAR JACK LOADED WITH 4 TERMINALS SHOWN ABOVE
 (SEE SHEET 4 FOR PART NUMBER AVAILABILITY)

REVISIONS	DATE	BY	REASON	REVISIONS	DATE	BY	REASON
G			REVISED PER UCR 1999-0688 99/04/19 JI/WAND	D			ADD - 10 CKT UCR 1999-0495 99/01/29 MUELLER
F			REVISED PER UCR2001-0755 JDS 01/02/16 BW	C			REVISED PER UCR 1999-0016 98/07/07 QIAO
				B			REVISED PER ECN *U3-0483 99/03/24 AFG
				A			REVISED PER ECN *U2-1321 9/11/92 AFG
				I			X-RELEASE PER ECN *U2-0698 4/09/92 BAP

REVISIONS	DATE	BY	REASON
LTR			REVISIONS

REVISIONS	DATE	BY	REASON
LTR			REVISIONS

REVISIONS	DATE	BY	REASON
LTR			REVISIONS

REVISIONS	DATE	BY	REASON
LTR			REVISIONS

REV.	SH.	MFG.
5	G	
4	G	
3	G	
2	G	
1	G	

MOLEX INCORPORATED SHEET NO. 1 OF 5 DATE 10/12/90
 TITLE ASSEMBLY, VERTICAL LOW PROFILE MODULAR JACKS (CONNECTOR SIZE 4)
 SEE SHEET 4 SDA-42878-***
 DIMENSIONS SHOWN UNLESS OTHERWISE SPECIFIED IN PARALLELS ARE IN INCHES UNLESS OTHERWISE SPECIFIED IN METRIC
 DRAWING APPLICABLE MUST REMAIN UNCHANGED
 DATE: 4/09/92 BY: BAP
 SCALE: 4:1
 CHECKED: BAP
 APPROVED: RAS

MODULAR JACK CHARACTERISTICS LEGEND

EXTERNAL CONNECTOR BODY DIMENSIONS: (SEE NOTES 8 AND 9)
 JACKS ARE AVAILABLE IN STANDARD 4, 6, AND 8 POSITION BODY SIZES

NUMBER OF CONTACT POSITIONS:
 CONNECTOR SIZE 4 CAN ACCOMMODATE 2 OR 4 TERMINALS;
 CONNECTOR SIZE 6 CAN ACCOMMODATE 2, 4, OR 6 TERMINALS;
 CONNECTOR SIZE 8 CAN ACCOMMODATE 2, 4, 6, 8, OR 10 TERMINALS

POLARIZATION OPTION:
 NO: JACKS WITHOUT KEYING SLOT
 YES: JACKS WITH KEYING SLOT (AVAILABLE ON CONNECTOR SIZE 8 ONLY)

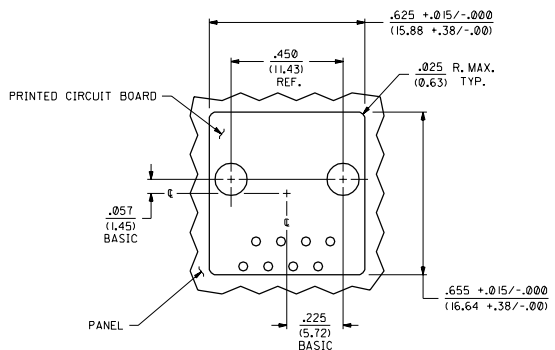
MOUNTING EARS OPTION:
 YES: JACKS WITH MOUNTING EARS
 NO: JACKS WITHOUT MOUNTING EARS

NOTES:

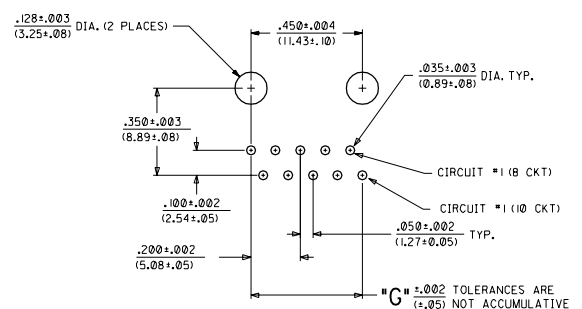
- 1) MATERIALS: HOUSING- POLYESTER, GLASS FILLED, UL94V-0, COLOR - BLACK
 TERMINALS- PHOSPHOR BRONZE ALLOY, .015/(0.38) THICK.
- 2) TERMINAL PLATING OPTIONS:
 595- .000050/(.00127) MIN. GOLD IN CONTACT AREA, .000050/(.00127) MIN. TIN-LEAD ON P.C. TAILS, AND .000050/(.00127) MIN. NICKEL UNDERPLATE OVERALL.
- 3) THESE MODULAR JACKS MEET THE PERFORMANCE REQUIREMENTS OF MOLEX PRODUCT SPECIFICATION PS-42878.
- 4) ALL JACKS ARE DESIGNED TO BE USED WITH .062/(1.57) OR .125/(3.18) THICK P.C. BOARDS.
- 5) ALL JACKS CONFORM TO AND ACCEPT PLUGS WHICH CONFORM TO FCC RULES AND REGULATIONS PART 6B, SUBPART F.
- 6) ALL JACKS MUST BE CAPABLE OF FITTING INTO MOLEX GAGE G-42878 (CONNECTOR SIZE 8).
- 7) ALL UNTOLERANCED DIMENSIONS ARE SHOWN FOR REFERENCE ONLY.
- 8) SEE SHEETS 1 & 4 FOR CONNECTOR SIZE 4.
- 9) SEE SHEETS 2 & 4 FOR CONNECTOR SIZE 6.
- 10) CONNECTORS ARE SHIPPED IN THERMOFORMED TRAYS, PER PACKAGING SPECIFICATION PK-42878-492.
- 11) THIS MODULAR JACK ASSEMBLY IS ALSO AVAILABLE IN A HIGH TEMPERATURE MATERIAL. (SEE MOLEX DRAWING SDA-43579-****)
- 12) ENGRAVED NUMBERS ON HOUSING BODY ARE FOR MOLDING IDENTIFICATION ONLY. THEY ARE NOT INTENDED FOR ASSEMBLY IDENTIFICATION PURPOSES.

P.C. BOARD THICKNESS	DIM. "D" (MTG. PEGS)	DIM. "F" (P.C. TAILS)
.062/(1.57)	.128 (3.25)	.120 +.015/-.025 (3.05 +.38/-.63)
.125/(3.18)	.191 (4.85)	.205 +.015/-.025 (5.21 +.38/-.63)

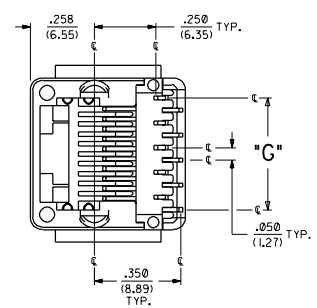
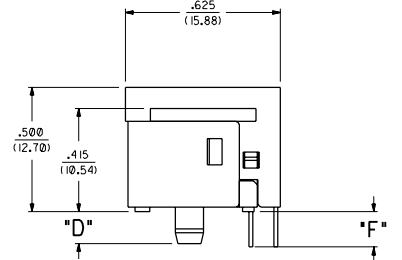
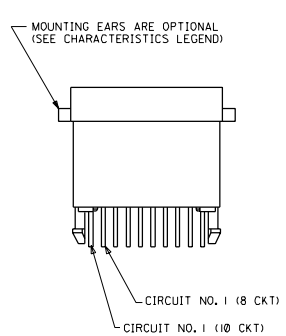
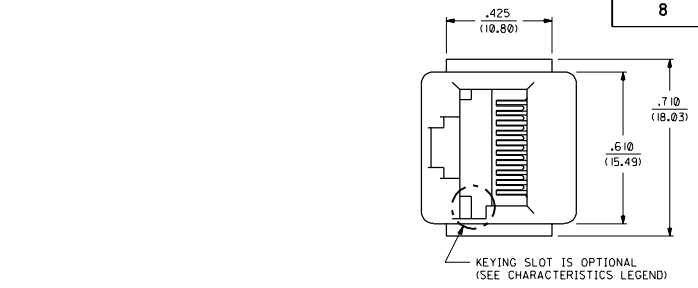
CONNECTOR SIZE	CIRCUIT SIZE	DIM. "G"
8	10	.450 (11.43)
8	8	.350 (8.89)
8	6	.250 (6.35)
8	4	.150 (3.81)
8	2	.050 (1.27)



PANEL CUT-OUT FOR CONNECTOR SIZE 8



P.C. BOARD LAYOUT FOR CONNECTOR SIZE 8
10 CIRCUIT SHOWN



SIZE 8 MODULAR JACK LOADED WITH 10 TERMINALS SHOWN ABOVE

E		B		D		A		C		I		G		F	
SEE SHEET 1	SEE SHEET 1	SEE SHEET 1	SEE SHEET 1	SEE SHEET 1	SEE SHEET 1	SEE SHEET 1	SEE SHEET 1	SEE SHEET 1	SEE SHEET 1	SEE SHEET 1	SEE SHEET 1	SEE SHEET 1	SEE SHEET 1	SEE SHEET 1	SEE SHEET 1

DIMENSIONS SHOWN UNLESS OTHERWISE SPECIFIED		INCH		METRIC		REVISE ONLY ON CAD SYSTEM	
TITLE		ASSEMBLY, VERTICAL LOW PROFILE MODULAR JACKS (CONNECTOR SIZE 8)		SHEET NO.		3	
DATE		04/09/92		MFG. SH. REV.			
DRAWN		BAP		CHECKED		BAP	
APP'D		RAS		SCALE		4:1	
MATERIAL		POLYESTER, GLASS FILLED		TERMINALS		PHOSPHOR BRONZE ALLOY	
SPEC. NO.		SDA-42878-***		MFG. NO.		CP D	

X=NOT TOOLED	ASSEMBLY ITEM NUMBER	PART CHARACTERISTICS					TERMINAL PLATING OPTION
		EXTERNAL CONNECTOR SIZE	NUMBER OF POSITIONS	P. C. BOARD THICKNESS	POLARIZATION OPTION	MOUNTING EARS OPTION	
	42878-8408	8 POS. BODY	8	.062	NO	YES	595
	42878-8410	↑	↑	↑	NO	NO	595
	42878-8456	↑	↑	↓	YES	YES	595
	42878-8458			.062	YES	NO	595
	42878-8504			.125	NO	YES	595
	42878-8506			↑	NO	NO	595
	42878-8552		↓	↑	YES	YES	595
	42878-8554		8	.125	YES	NO	595
	42878-8696		6	.062	NO	YES	595
	42878-8698		↑	↑	NO	NO	595
	42878-8744		↑	↓	YES	YES	595
	42878-8746			.062	YES	NO	595
	42878-8792			.125	NO	YES	595
	42878-8794			↑	NO	NO	595
	42878-8840	↓		↑	YES	YES	595
	42878-8842	8 POS. BODY	6	.125	YES	NO	595

X=NOT TOOLED	ASSEMBLY ITEM NUMBER	PART CHARACTERISTICS					TERMINAL PLATING OPTION
		EXTERNAL CONNECTOR SIZE	NUMBER OF POSITIONS	BOARD THICKNESS/P.C. TAIL OPTION	POLARIZATION OPTION	MOUNTING EARS OPTION	
	42878-8984	8 POS. BODY	4	.062	NO	YES	595
	42878-8986	↑	↑	↑	NO	NO	595
	42878-9032	↑	↑	↓	YES	YES	595
	42878-9034			.062	YES	NO	595
	42878-9080			.125	NO	YES	595
	42878-9082			↑	NO	NO	595
	42878-9128		↓	↑	YES	YES	595
	42878-9130		4	.125	YES	NO	595
	42878-9272		2	.062	NO	YES	595
	42878-9274		↑	↑	NO	NO	595
	42878-9320			↓	YES	YES	595
	42878-9322			.062	YES	NO	595
	42878-9368			.125	NO	YES	595
	42878-9370			↑	NO	NO	595
	42878-9416	↓		↓	YES	YES	595
	42878-9418	8 POS. BODY	2	.125	YES	NO	595

X=NOT TOOLED	ASSEMBLY ITEM NUMBER	PART CHARACTERISTICS					TERMINAL PLATING OPTION
		EXTERNAL CONNECTOR SIZE	NUMBER OF POSITIONS	BOARD THICKNESS/P.C. TAIL OPTION	POLARIZATION OPTION	MOUNTING EARS OPTION	
	42878-1001	8 POS. BODY	10	.062	NO	YES	595
	42878-1003	↑	↑	.062	NO	NO	595
	42878-1025	↑	↑	.125	NO	YES	595
	42878-1027			↑	NO	NO	595
	42878-1037	↓	↓	↑	YES	YES	595
	42878-1039	8 POS. BODY	10	.125	YES	NO	595

CHARACTERISTICS LEGEND

EXTERNAL CONNECTOR BODY DIMENSIONS:
AVAILABLE IN 4, 6, AND 8 POSITION BODY

NUMBER OF CONTACT POSITIONS:
CONNECTOR SIZE 4 ACCOMMODATES 2, OR 4 TERMINALS;
CONNECTOR SIZE 6 ACCOMMODATES 2, 4, OR 6 TERMINALS;
CONNECTOR SIZE 8 ACCOMMODATES 2, 4, 6, 8, OR 10 TERMINALS

POLARIZATION OPTION: (AVAILABLE ON CONNECTOR SIZE 8 ONLY)
"NO"= WITHOUT KEYING SLOT
"YES"= WITH KEYING SLOT

MOUNTING EARS OPTION:
"YES"= PART WITH MOUNTING EARS
"NO"= PART WITHOUT MOUNTING EARS

(SEE SHEET 3 FOR PART DESCRIPTIONS AND DIMENSIONS)

DIMENSIONS SHOWN IN METRIC UNLESS OTHERWISE SPECIFIED TO THE CONTRARY		REV. LTR.		REV. 5	REV. 04/09/92
TITLE		ASSEMBLY, VERTICAL JACKS (CONNECTOR SIZE 8)			
DRAWN BY: BAP		CHECKED BY: BAP		DATE: 04/09/92	
APP'D: RAS		SCALE: 1:1		SHEET NO. 5	
MFG. SH.		REV.		REVISIONS	
A		B		C	
D		E		F	
G		H		I	
SEE SHEET 1		SEE SHEET 1		SEE SHEET 1	
SEE SHEET 1		SEE SHEET 1		SEE SHEET 1	
SEE SHEET 1		SEE SHEET 1		SEE SHEET 1	
SEE SHEET 1		SEE SHEET 1		SEE SHEET 1	

SEE CHART SDA-42878-***