

# PCMCIA HEADERS



## MEMPAK™ HeaderPart Number

**MCH 068 T A L 01 A TR30**

Memory Card Headers

Number of Contacts  
68 or 136 Position

Mounting Styles  
T-Top Mount, Right Angle  
B-Bottom Mount, Right Angle  
\*V-Vertical Mount

Contact Styles  
A-Thru Hole  
\*C-SMT, 2 Row Leads  
\*D-SMT, Single Row

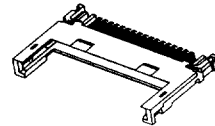
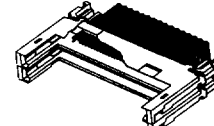
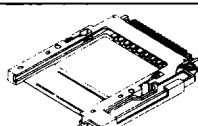
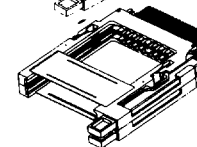
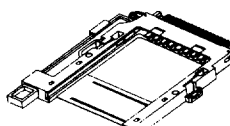
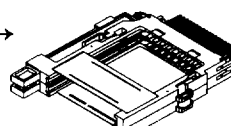
Header Style  
L-Left Eject  
N-No Eject  
R-Right Eject

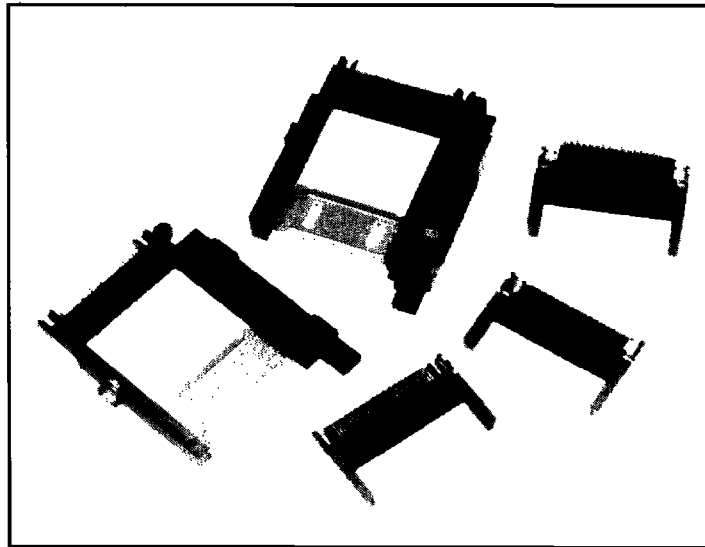
Contact Plating  
TR30-30 microinch ROBEX®

ESD/Solder Retent Clip  
A-No ESD, No Solder Clip  
B-No ESD, Solder Clip  
C-ESD, No Solder Clip  
D-ESD, Solder Clip

Insulator Body Style  
01-Standard, Single Profile  
02-4mm Standoff, Single Profile  
03-7mm Standoff, Single Profile  
05-2.5mm Standoff, Single Profile  
06-5.5mm Standoff, Single Profile  
21-Standard, Stacked Profile  
22 -Stacked Profile, 5mm Standoff

\*Contact Factory

Description	View	Page
PCMCIA Spec single or stacked headers in high-temp plastic with <u>no</u> eject. Available with standoff heights in top or bottom mount. Snap latch for PCB retention and ESD are optional.	MCH068TAN01ATR30 → 	15-22
	MCH136TAN21ATR30 → 	23-26
PCMCIA Spec single or stacked headers in high-temp plastic with <u>right</u> eject. Available with standoff heights in top or bottom mount. Snap latch for PCB retention and ESD are optional.	MCH068TAR01 DTR30 → 	27-34
	MCH136TAR21CTR30 → 	35-38
PCMCIA Spec single or stacked headers in high-temp plastic with <u>left</u> eject. Available with standoff heights in top or bottom mount. Snap latch for PCB retention and ESD are optional.	MCH068TAL01ATR30 → 	39-46
	MCH136TAL21ATR30 → 	47-50



## Feature

Meets PCMCIA Spec

8.8 lbs. Insertion Force maximum

1.5 lbs. Withdrawal Force minimum

Minimum card guide rail length of .394"

Header pin tapered .030" in mating area

Types I, II and III compatible with multiple standoff heights. Available with or without ESD protection and/or eject

Reinforced solder and SMT tails in high temp plastic insulator

ESD solder retent clip or snap latch available for solder reflow or SMT applications

Ejection in header accomplished via unique two-piece, non-metallic design

Reversed mounting available

Stacked header version with eject and ESD allows insertion of Type I, II, or III cards in bottom header

Angled lead in on solder pins with inherent beam reinforcement

## Benefit

Guaranteed universal intermateability to all PCMCIA standard cards.

Maximum reliability in inserting and aligning PCMCIA card.

Provides easy insertion to receptacle contacts. Reduces schiving of plating. Aides in proper alignment preventing pin stubbing.

Versatile product line requiring only one qualification spec on header pins for all current and future applications. One header accepts all PCMCIA card types.

Maintains rigid alignment of tails into the through hole or to the SMT pads preventing pin-to-PCB stubbing or the need for lead straightening. One insulator style for both SMT and solder reflow applications.

Ultimate ease of header placement and positioning on PCB for ESD and unshielded applications. Provides secure hold down and ESD ground path without expensive, cumbersome hardware. Quick and reliable.

Provides direct trouble-free operation. Lack of unnecessary metal reduces weight of part by 30% compared to metal ejectors.

Simple conversion of header from top mount to bottom mount.

Ultimate versatility and assurance of future compatibility to all PCMCIA card requirements.

Easy hand or automated insertion of solder pins into PCB thru-hole. No more bent pins or misalignment thus preventing pin stubbing and damage to PCB traces.

## Headers

## SPECIFICATIONS

**MECHANICAL (meets all requirements of PCMCIA Specifications)**

Flammability Rating:	94V-0	Approvals Pending:
Durability-Office Environment:	10,000 Cycles Minimum	#E73746
Durability-Harsh Environment:	5,000 Cycles Minimum	#4698
Receptacles: Insertion Force (68 contacts):	8.8 lbs maximum per PCMCIA	
Withdrawal Force (68 contacts):	1.5 lbs minimum per PCMCIA	
Contact Override:	.082" (2.08mm) Average/.040" (1.01mm) minimum	

**ELECTRICAL (meets all requirements of PCMCIA Specifications)**

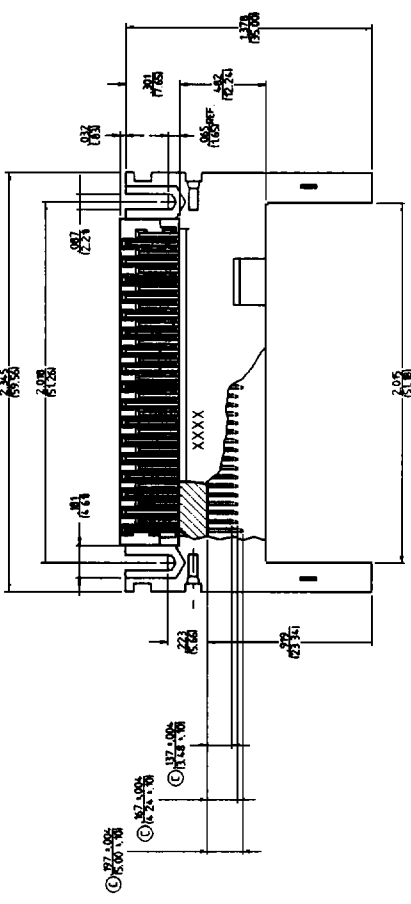
Contact Resistance:	40 Milliohms maximum
Insulation Resistance:	1,000 megohms minimum
Dielectric Withstanding Voltage:	500 Vrms for one minute
Current Capacity:	0.5 Amps per pin
Header: Power Pins, .197" (5.0mm) long	1, 17, 34, 35, 51, 68
Signal Pins, .167" (4.24mm) long	2-16, 18-33, 37-50, 52-66
Detect Pins, .137" (3.48mm) long	36, 67

**ENVIRONMENTAL (meets all requirements of PCMCIA Specifications)**

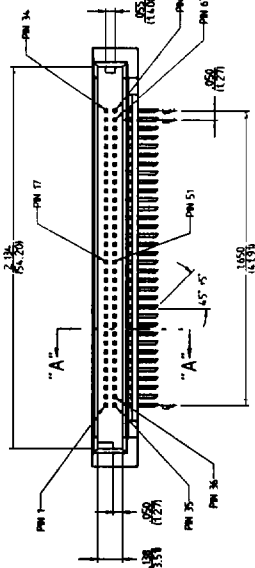
Storage Environment:	-40°C to + 70°C, 95% RH Non-condensing
Operating Environment:	-20°C to + 60°C, 95% RH Non-condensing
Thermal Shock:	5 cycles (1 cycle/hour) with connector engaged with extremes of -55°C to + 70°C.

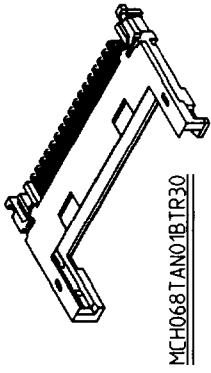
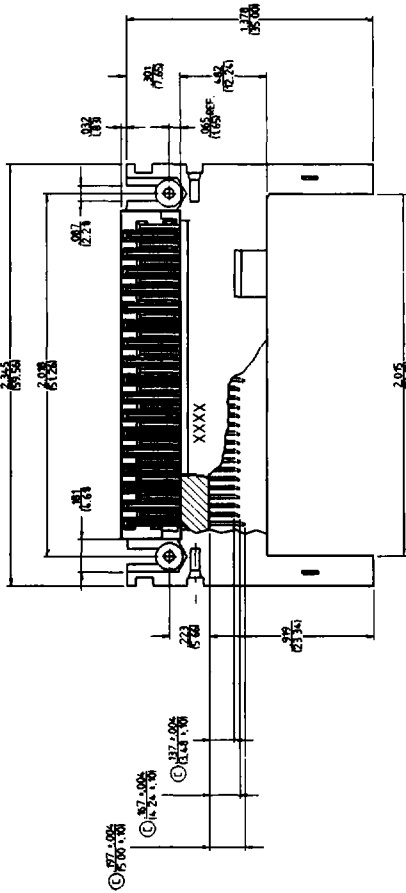
**MATERIALS**

Body: High Temp, Black Thermoplastic  
 Contact: Copper Alloy  
 Plating:  
**TR30** = ROBEX® [27 µinch (.686 µm) minimum Palladium Nickel with 3 µinch (.076 µm) minimum Gold flash] on contact area.  
 100 µinch (2.54 µm) minimum Tin/Lead on terminal area  
 50 µinch (1.27 µm) minimum Nickel underplate



MCH068TAN01ATR30



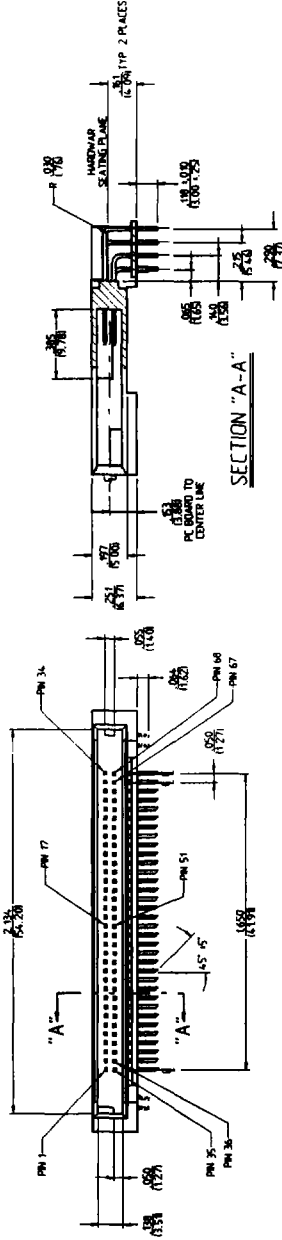


MCH068TAN01BTR30

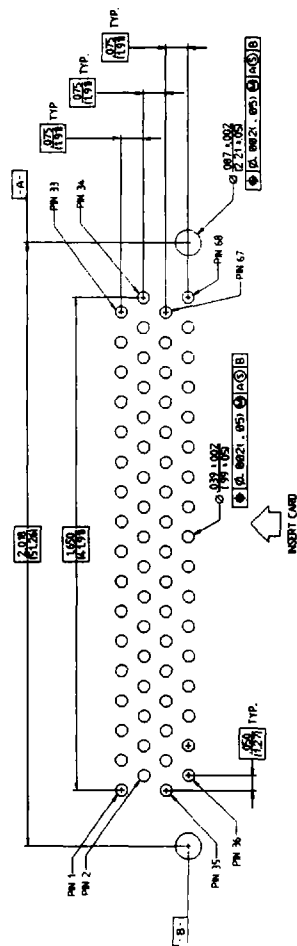
MCH 068 T A N 01 B TR30

MO - MEMORY CARD HEADER  
 NUMBER OF CONTACTS  
 MOUNTING STYLE:  
 T - TOP MOUNT, RIGHT ANGLE  
 CONTACT STYLE  
 A - THRU HOLE  
 HEADER STYLE  
 N - NO EJECT

CONTACT PLATING  
 TR30  
 SOLDER OPTION RETENT  
 B - NO ESD SOLDER RETENT CLIP  
 INSULATOR BODY STYLE  
 01 - STANDARD SINGLE PROFILE



SECTION "A-A"



RECOMMENDED MOUNTING HOLE LAYOUT

**HEADER:**

Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

**NOTES:**

1. All dimensions are in inches. Metric equivalence in parentheses are for reference only.
2. All parts packaged in tubes unless requested.
3. Available in bottom mount.
4. Solder retent clip suitable for .040 - .093 PCB.
5. Plated thru holes shall be linked to the PCB grounding path.

CUSTOMER DRAWING

**Robinson Nugent**

812/945-0211  
 812/945-0805 FAX

**MEMPAK™ MCH068TAN01BTR30**  
 68 Position, Top Mount, Right Angle Header  
 No Eject, No ESD, with Retent Clip

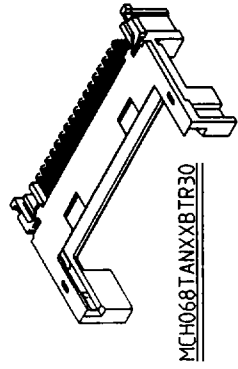








PART DESCRIPTION	STANDOFF HEIGHT	PC BOARD TO CENTER LINE	TOTAL COMPONENT HEIGHT	DMV "A" HARDWARE REFERENCE
MCH068TAN02BTR30	.157 (4.00)	.256 (6.50)	.354 (9.00)	.264 (6.70)
MCH068TAN03BTR30	.275 (7.00)	.374 (9.50)	.472 (12.00)	.382 (9.70)



MCH068TANXXBTR30

MCH 068 T A N X X B T R 30

NON-HERMETIC CARD HEADER  
NUMBER OF CONTACTS  
MOUNTING STYLE  
CONTACT STYLE  
HEADER STYLE

1 - TOP MOUNT  
A - THROUGH HOLE  
N - NO EJECT

CONTACT PLATING  
19-30  
CONTACT BEAD OR SOLDER RETENT  
0 - NO ESD, SOLDER RETENT CLIP  
1 - ESD, SOLDER RETENT CLIP  
INSULATOR BODY - USE SINGLE PROBE  
01 - 7.0mm STANDOFF SINGLE PROBE

**HEADER:**  
Power Pins, .197" (5.0mm) long:  
1, 17, 34, 35, 51, 68  
Signal Pins, .167" (4.24mm) long:  
2-16, 18-33, 37-50, 52-66  
Detect Pins, .137" (3.48mm) long:  
36, 67

**NOTES:**

1. All dimensions are in inches. Metric equivalence in parentheses are for reference only.
2. All parts packaged in tubes unless requested.
3. Available in bottom mount.
4. Solder retent clip suitable for .040 - .093 PCB.
5. Plated thru holes shall be linked to the PCB grounding path.

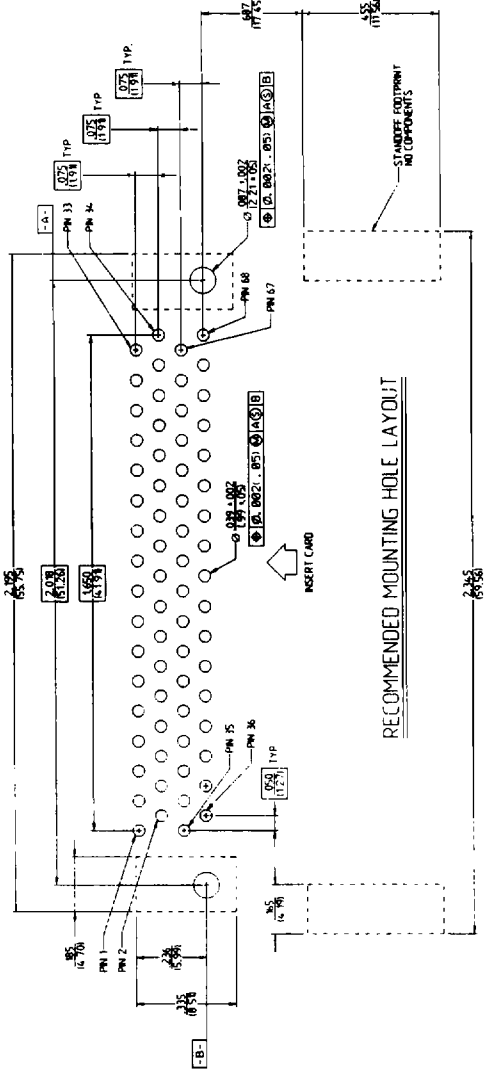
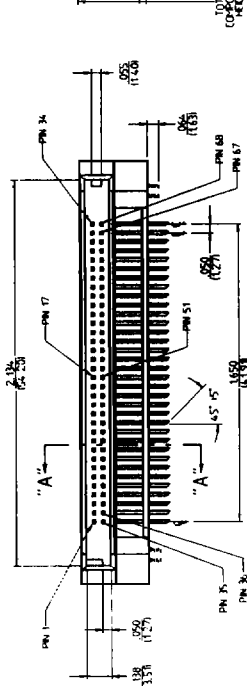
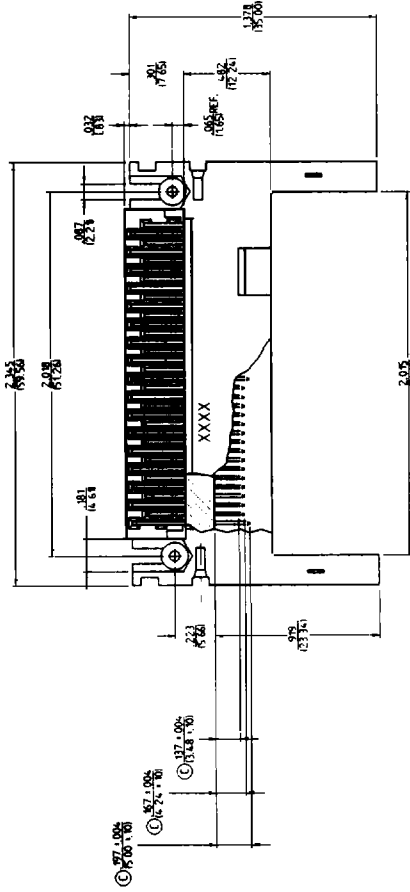
CUSTOMER DRAWING

**Robinson  
Nugent**

812/945-0211  
812/945-0805 FAX

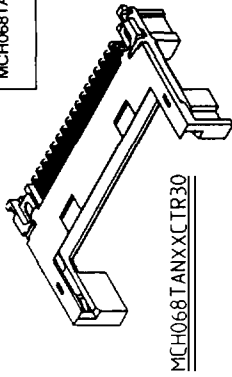
**MEMPAK™ MCH068TANXXBTR30**

68 Position, Top Mount, Right Angle Header  
No Eject, No ESD, with Retent Clip and Standoffs

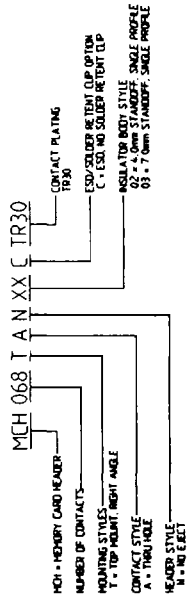
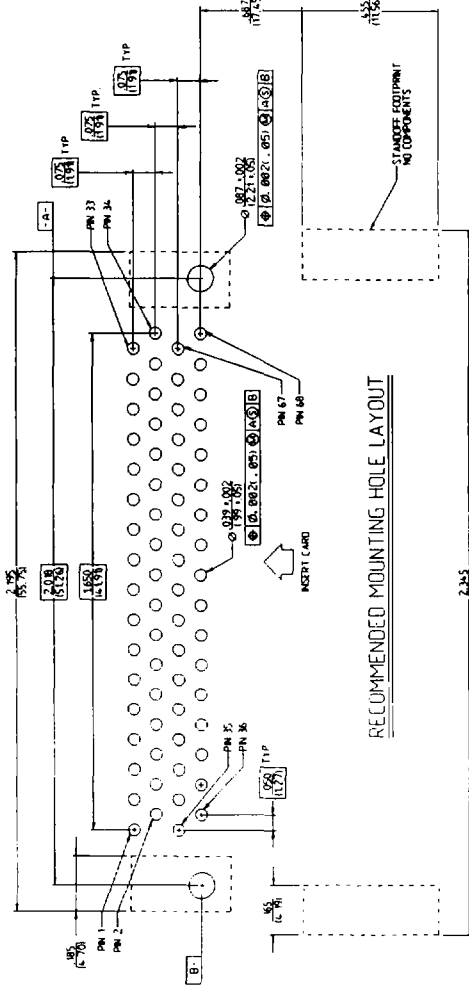
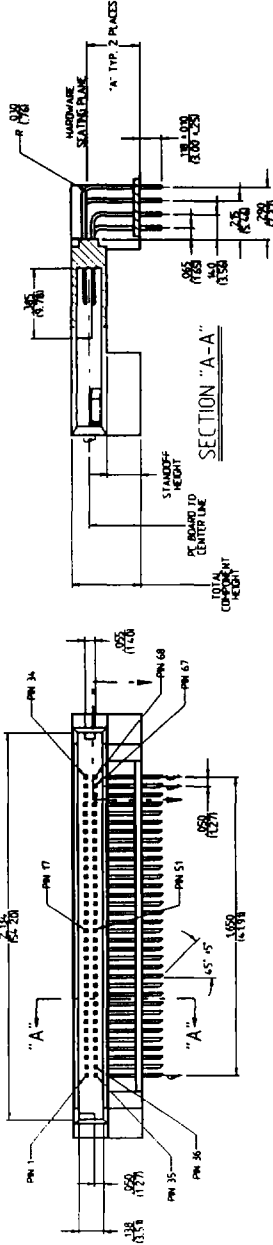
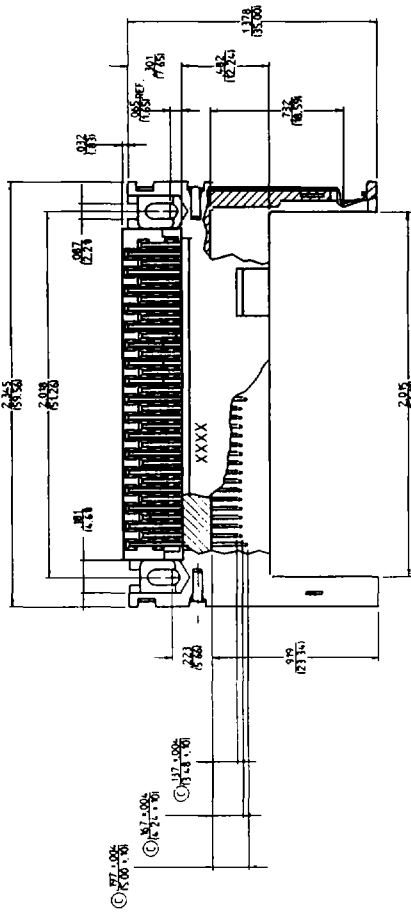


RECOMMENDED MOUNTING HOLE LAYOUT

PART DESCRIPTION	STANDOFF HEIGHT	PC BOARD TO CENTER LINE	TOTAL COMPONENT HEIGHT	DIM "A" HARDWARE REFERENCE
MCH068TAN02CTR30	.157 (4.00)	.256 (6.50)	.354 (9.00)	.278 (7.06)
MCH068TAN03CTR30	.275 (7.00)	.374 (9.50)	.472 (12.00)	.396 (10.06)



MCH068TANXXCTR30



**HEADER:**

Power Pins, .197" (5.0mm) long:  
1, 17, 34, 35, 51, 68  
Signal Pins, .167" (4.24mm) long:  
2-16, 18-33, 37-50, 52-66  
Detect Pins, .137" (3.48mm) long:  
36, 67

**NOTES:**

- All dimensions are in inches. Metric equivalence in parentheses are for reference only.
- All parts packaged in tubes unless requested.
- Acquire size M2(0-80 UNC) screws for hold down hardware.
- Plated thru holes shall be linked to the PCB grounding path.

CUSTOMER DRAWING

**Robinson  
Nugent**

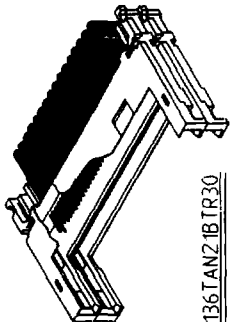
812/945-0211  
812/945-0805 FAX

**MEMPAK™ MCH068TANXXCTR30**  
68 Position, Top Mount, Right Angle Header  
No Eject with ESD, No Retent Clip with Standoffs





PART DESCRIPTION	DIM "A" STANDOFF HEIGHT	DIM "B" STANDOFF HEIGHT	DIM "C" PC BOARD TO CENTER LINE	DIM "D" PC BOARD TO CENTER LINE	TOTAL COMPONENT HEIGHT
MCH136TAN21BTR30	.054 (1.37)	.047 (1.20)	.146 (3.70)	.397 (10.08)	.495 (12.57)



MCH136TAN21BTR30

**HEADER:**  
 Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

**NOTES:**

- All dimensions are in inches. Metric equivalence in parentheses are for reference only.
- All parts packaged in tubes unless requested.
- Available in bottom mount.
- Solder retent clip suitable for .040 - .093 PCB.
- Plated thru holes shall be linked to the PCB grounding path.

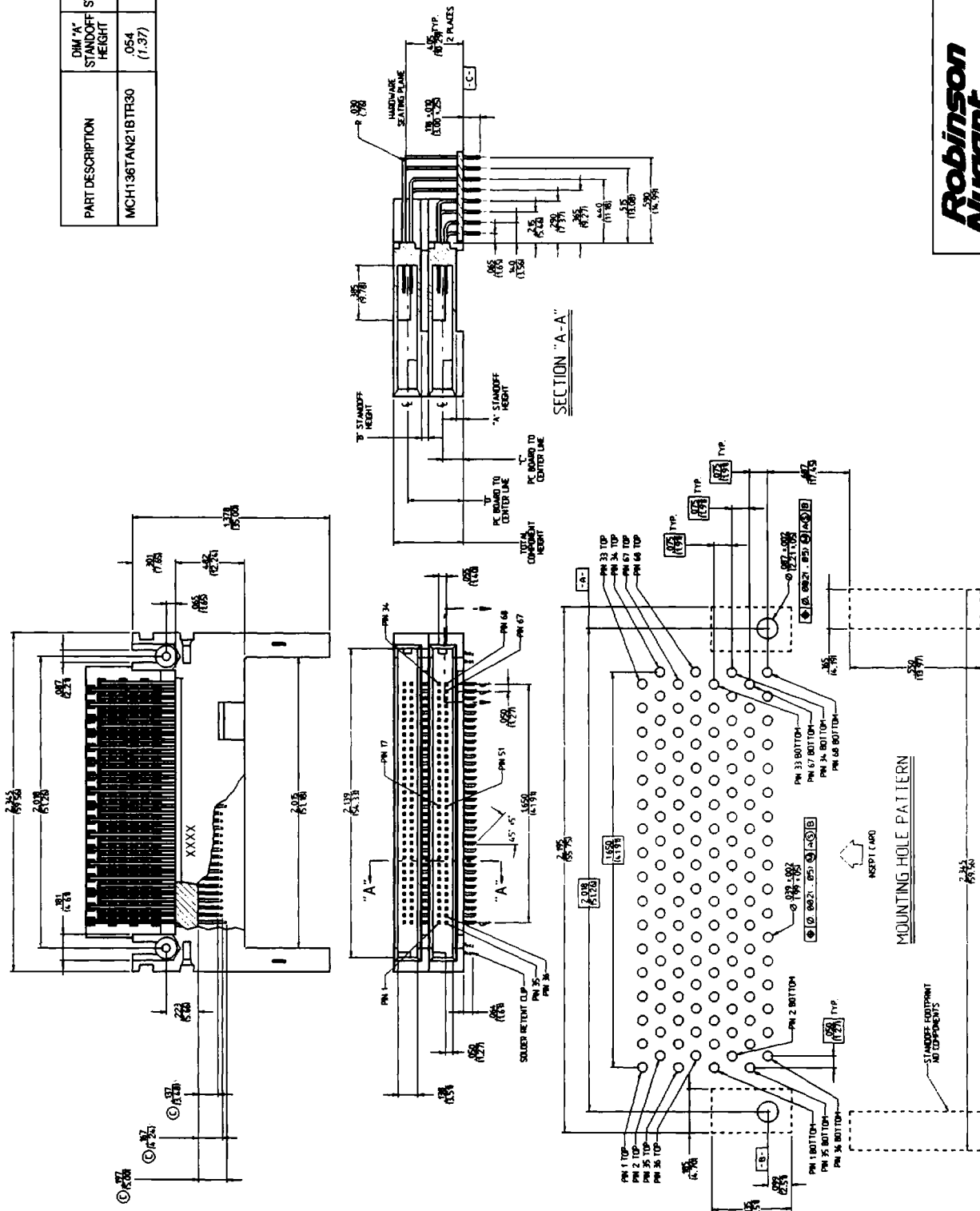
CUSTOMER DRAWING

**Robinson  
Nugent**

812/945-0211  
 812/945-0805 FAX

**MEMPAK™ MCH136TAN21BTR30**

136 Position, Top Mount, Right Angle Header  
 No Eject, No ESD, with Retent Clip, Stacked

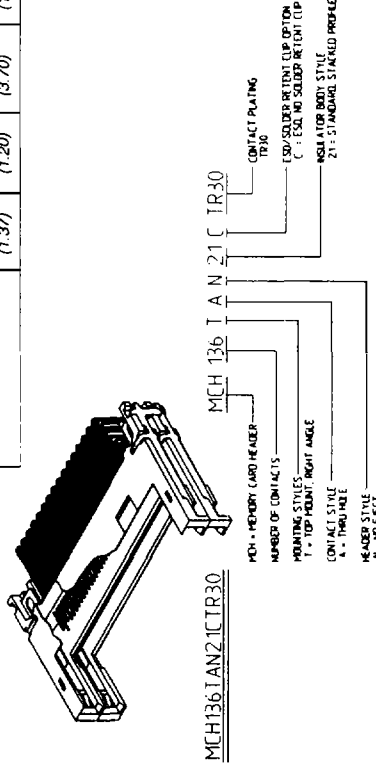


MCH 136 I A N 21 B TR30

MCH - MEMPAK CARD HEADER  
 NUMBER OF CONTACTS  
 MOUNTING STYLE  
 1 - TOP MOUNT, RIGHT ANGLE  
 CONTACT STYLE  
 A - THRU HOLE  
 N - NO EJECT

CONTACT PLATING  
 ESD/SOLDER RETENT CLIP OPTION  
 B - NO ESD, SOLDER RETENT CLIP  
 INSULATOR BODY STYLE  
 Z1 - STANDARD STACKED PROFILE

PART DESCRIPTION	DIM "A" STANDOFF HEIGHT	DIM "B" STANDOFF HEIGHT	DIM "C" PC BOARD TO CENTER LINE	DIM "D" PC BOARD TO CENTER LINE	TOTAL COMPONENT HEIGHT
MCH136TAN21CTR30	.054 (1.37)	.047 (1.20)	.146 (3.70)	.397 (10.08)	.495 (12.57)



**HEADER:**  
 Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

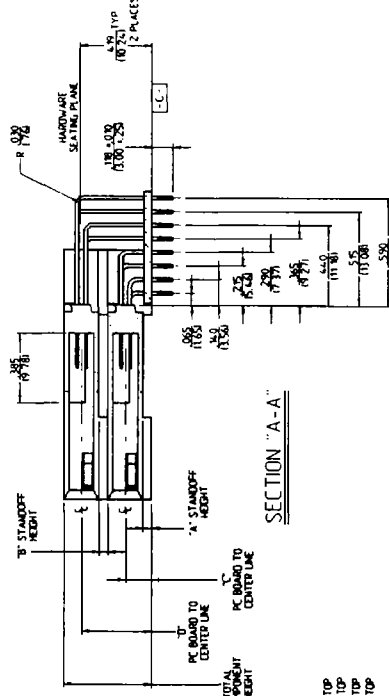
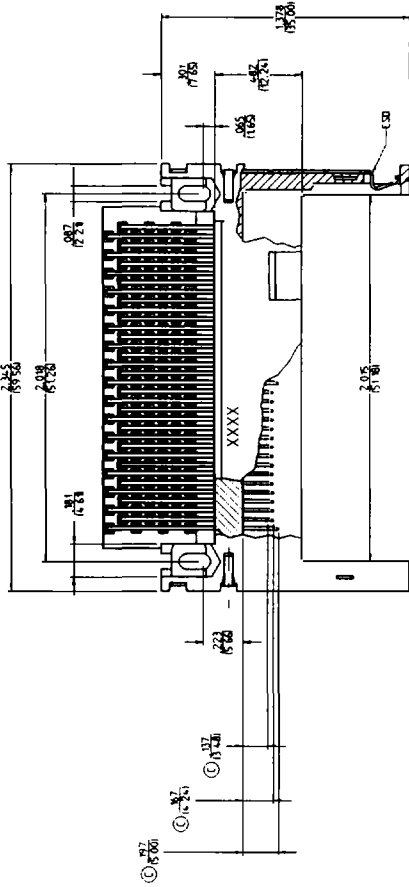
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2. All parts packaged in tubes unless requested.
3. Available in bottom mount.
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5. Plated thru holes shall be linked to the PCB grounding path.

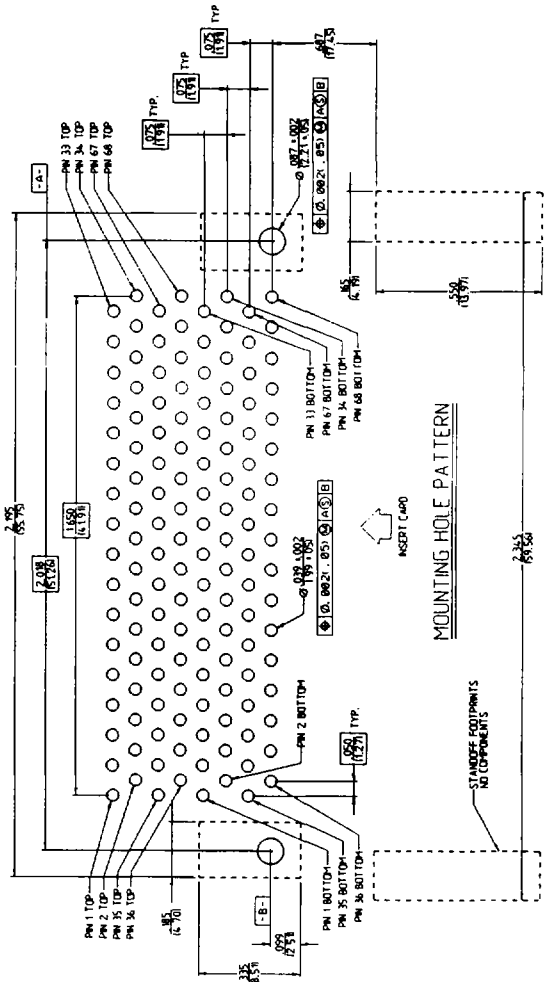
**CUSTOMER DRAWING**

**Robinson Nugent**  
 812/945-0211  
 812/945-0805 FAX

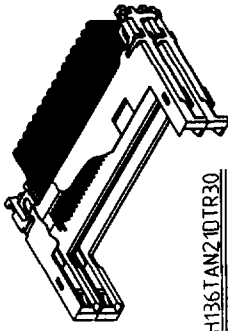
**MEMPAK™ MCH136TAN21CTR30**  
 136 Position, Top Mount, Right Angle Header  
 No Eject, with ESD, No Retent Clip, Stacked



**SECTION "A-A"**



PART DESCRIPTION	DIM "A" STANDOFF HEIGHT	DIM "B" STANDOFF HEIGHT	DIM "C" PC BOARD TO CENTER LINE	DIM "D" PC BOARD TO CENTER LINE	TOTAL COMPONENT HEIGHT
MCH136TAN21DTR30	.054 (1.37)	.047 (1.20)	.146 (3.70)	.397 (10.08)	.495 (12.57)



MCH136TAN21DTR30

**HEADER:**  
 Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

**NOTES:**

- All dimensions are in inches. Metric equivalence in parentheses are for reference only.
- All parts packaged in tubes unless requested.
- Available in bottom mount.
- Solder retent clip suitable for .040 - .093 PCB. Plated thru holes shall be linked to the PCB grounding path.

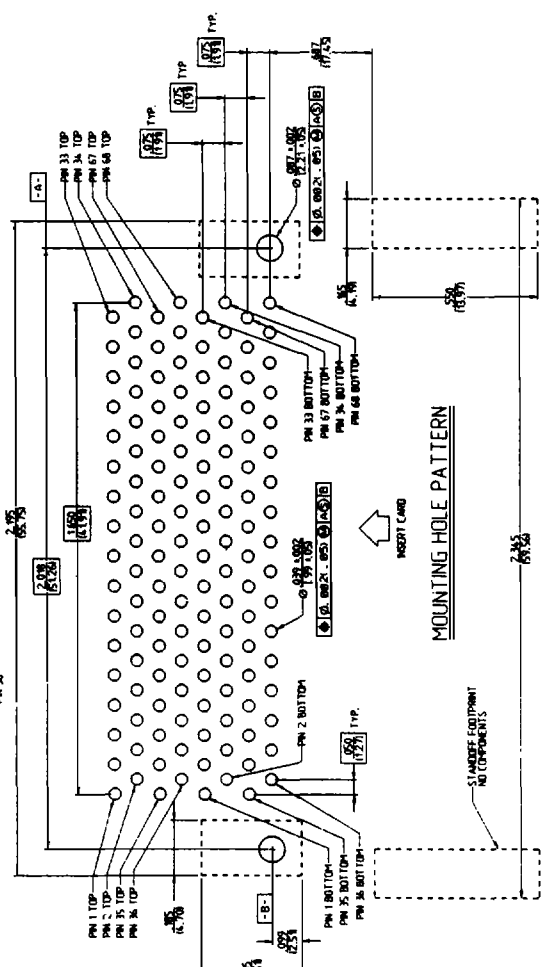
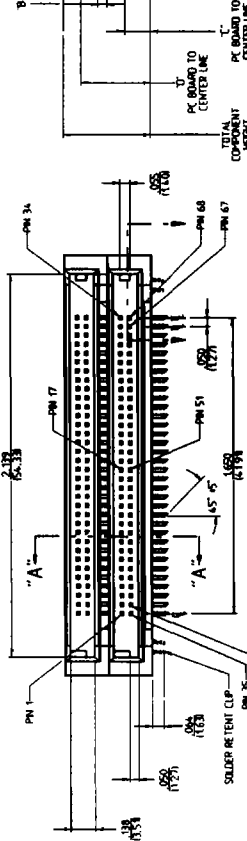
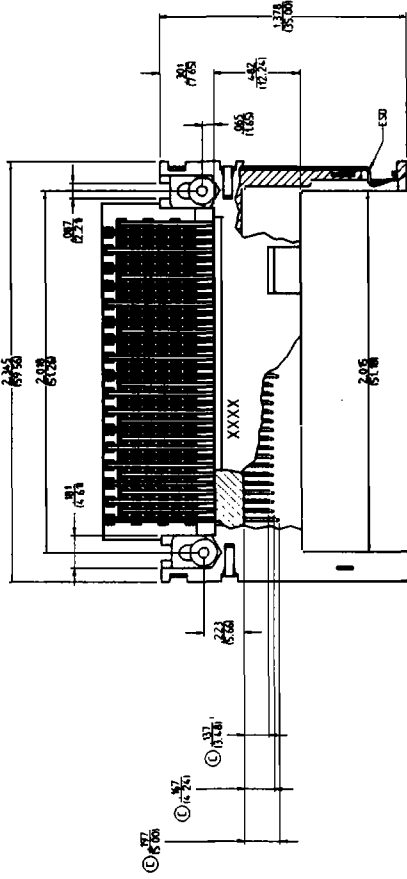
CUSTOMER DRAWING

**Robinson  
Nugent**

812/945-0211  
812/945-0805 FAX

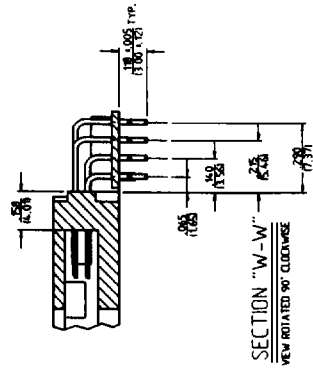
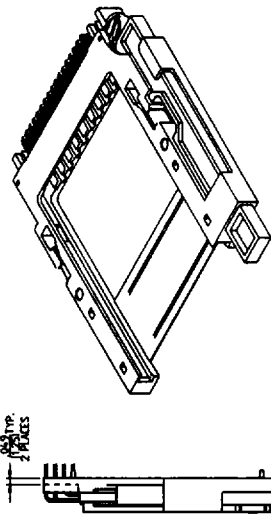
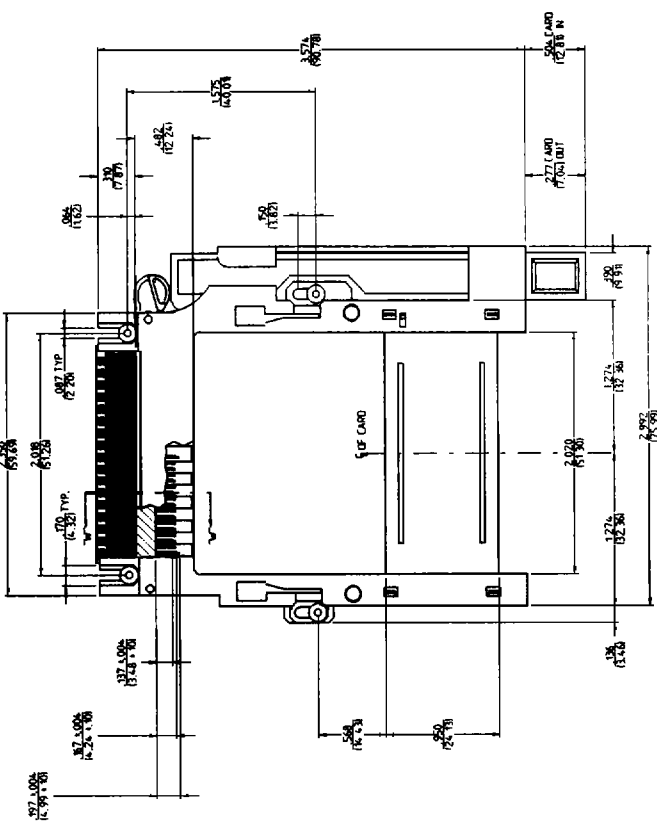
**MEMPAK™ MCH136TAN21DTR30**

136 Position, Top Mount, Right Angle Header  
No Eject, with ESD and Solder Clip, Stacked









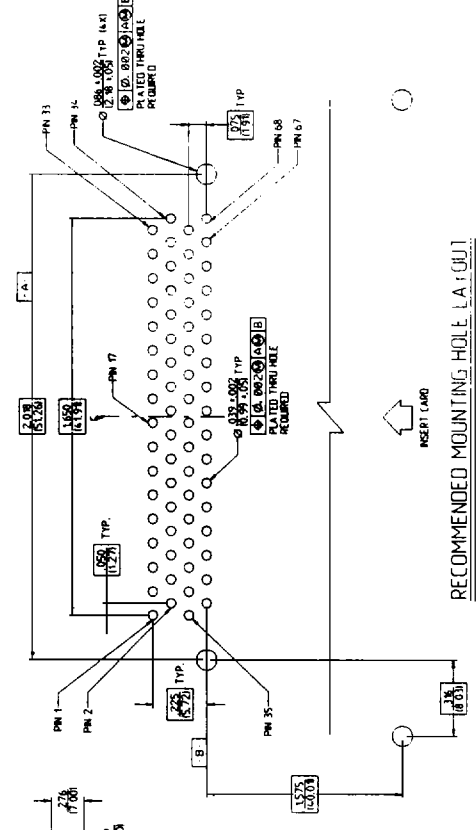
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 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

- NOTES:**
- All dimensions are in inches. Metric equivalence in parentheses are for reference only.
  - All parts packaged in tubes unless requested.
  - Available in bottom mount.
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  - Plated thru holes shall be linked to the PCB grounding path.

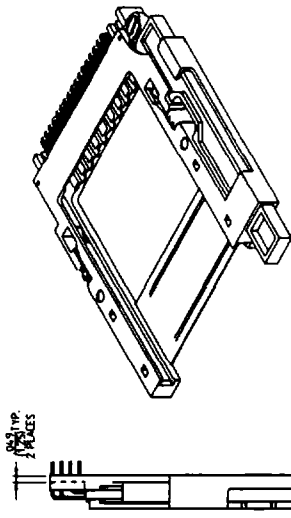
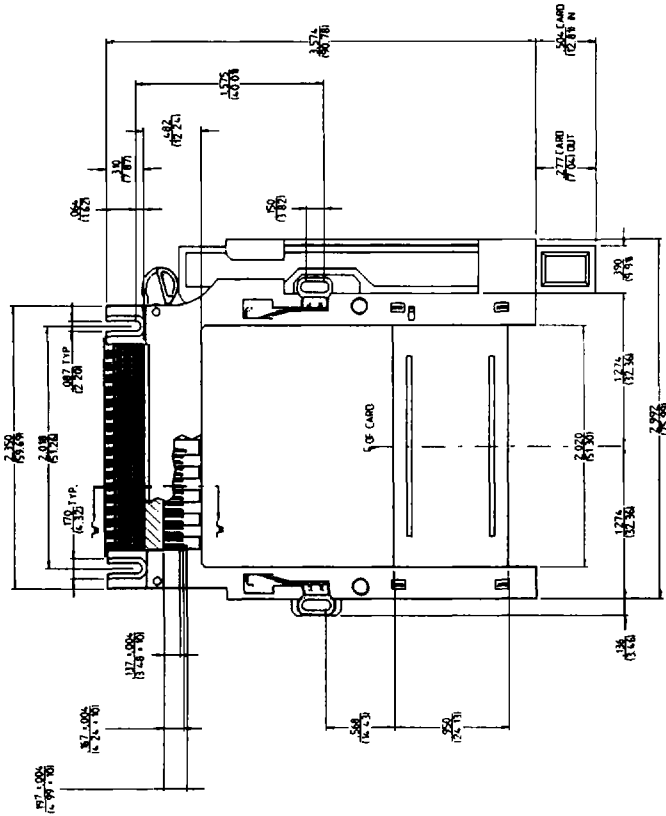
CUSTOMER DRAWING

**Robinson Nugent**  
 812/945-0211  
 812/945-0805 FAX

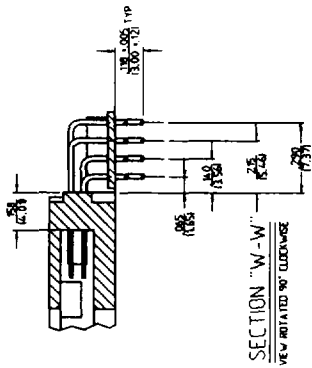
**MEMPAK™ MCH068TAR01BTR30**  
 68 Position, Top Mount, Right Angle Header  
 Right Eject, No ESD with Retent Clip



MCH - MEMORY CARD HEADER  
 TR 30  
 NUMBER OF CONTACTS  
 MOUNTING STYLE:  
 T - TOP MOUNT, RIGHT ANGLE  
 CONTACT STYLE:  
 A - THRU HOLE  
 B - NO ESD, SOLDER RETENT CLIP  
 C - INSULATOR BODY, SINGLE PROFILE  
 D - STANDARD SINGLE PROFILE  
 HEADER STYLE:  
 R - RIGHT EJECT



MCH068TAR01CTR30

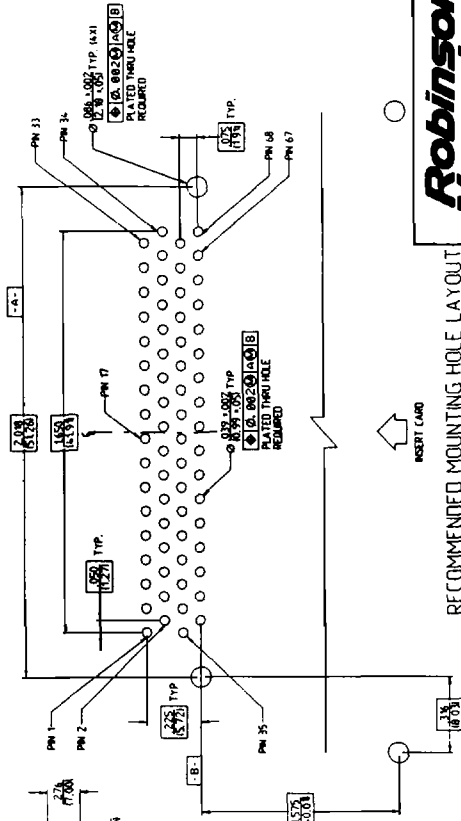


**HEADER:**

- Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

**NOTES:**

- All dimensions are in inches. Metric equivalence in parentheses are for reference only.
- All parts packaged in tubes unless requested.
- Acquire size M2(0-80 UNC) screws for hold down hardware.
- Plated thru holes shall be linked to the PCB grounding path.



MCH 068 I A R 01 C IR30

PCB - MEMORY CARD HEADER  
 NUMBER OF CONTACTS  
 MOUNTING STYLE  
 T - TOP MOUNT, RIGHT ANGLE  
 A - THRU HOLE  
 R - RIGHT EJECT

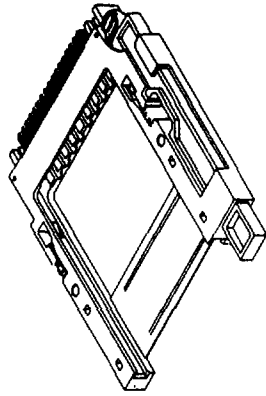
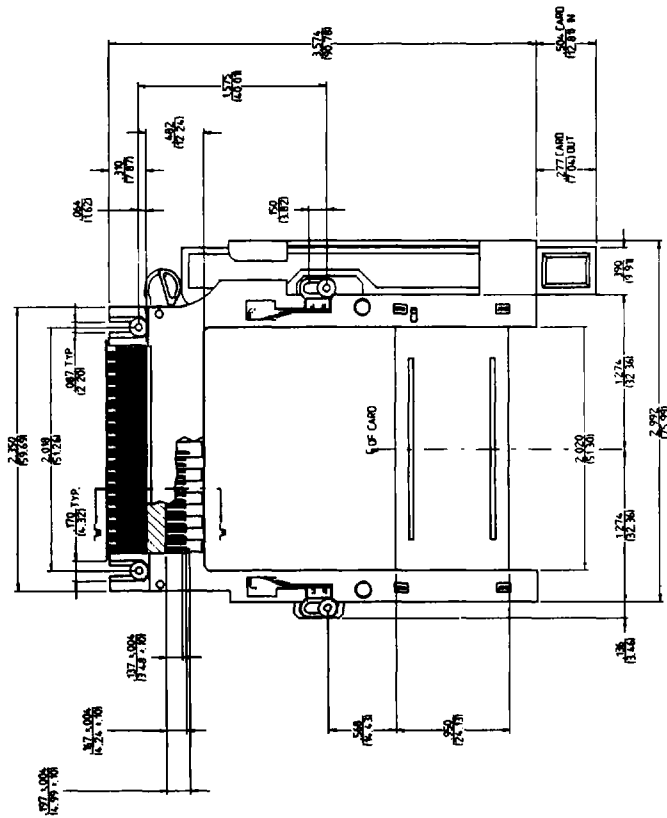
CONTACT PLATING  
 TR30  
 ESD / SOLIDER RETENT CLIP  
 C - ESD NO SOLIDER RETENT CLIP  
 INSULATOR BODY STYLE  
 01 - STANDARD SHIELD PROFILE

CUSTOMER DRAWING

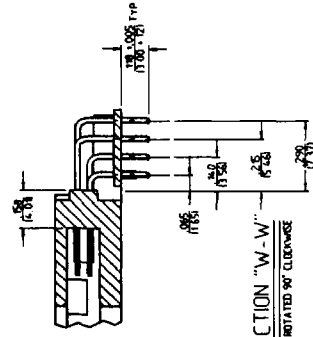
**Robinson Nugent**

MEMPAK™ MCH068TAR01CTR30  
 68 Position, Top Mount, Right Angle Header  
 Right Eject, with ESD, No Retent Clip

812/945-0211  
 812/945-0805 FAX



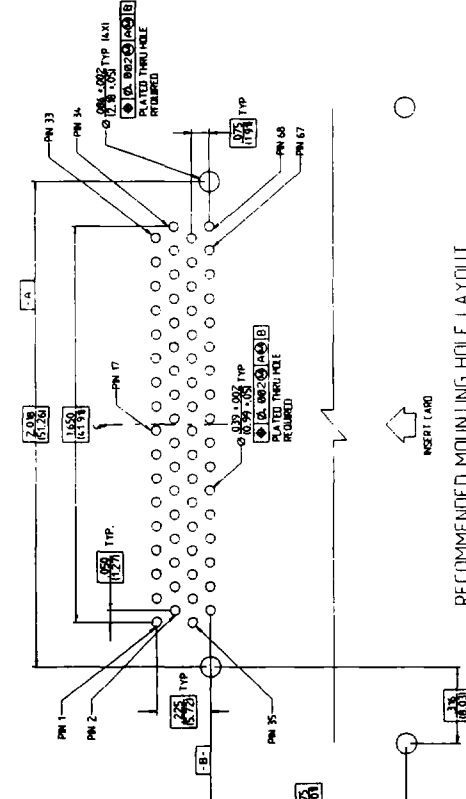
MCH068TAR01DTR30



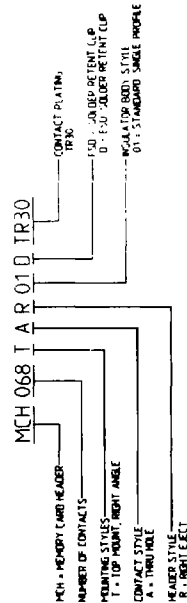
**HEADER:**  
 Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

**NOTES:**

1. All dimensions are in inches. Metric equivalence in parentheses are for reference only.
2. All parts packaged in tubes unless requested.
3. Available in bottom mount.
4. Solder retent clip suitable for .040 - .093 PCB.
5. Plated thru holes shall be linked to the PCB grounding path.



RECOMMENDED MOUNTING HOLE LAYOUT

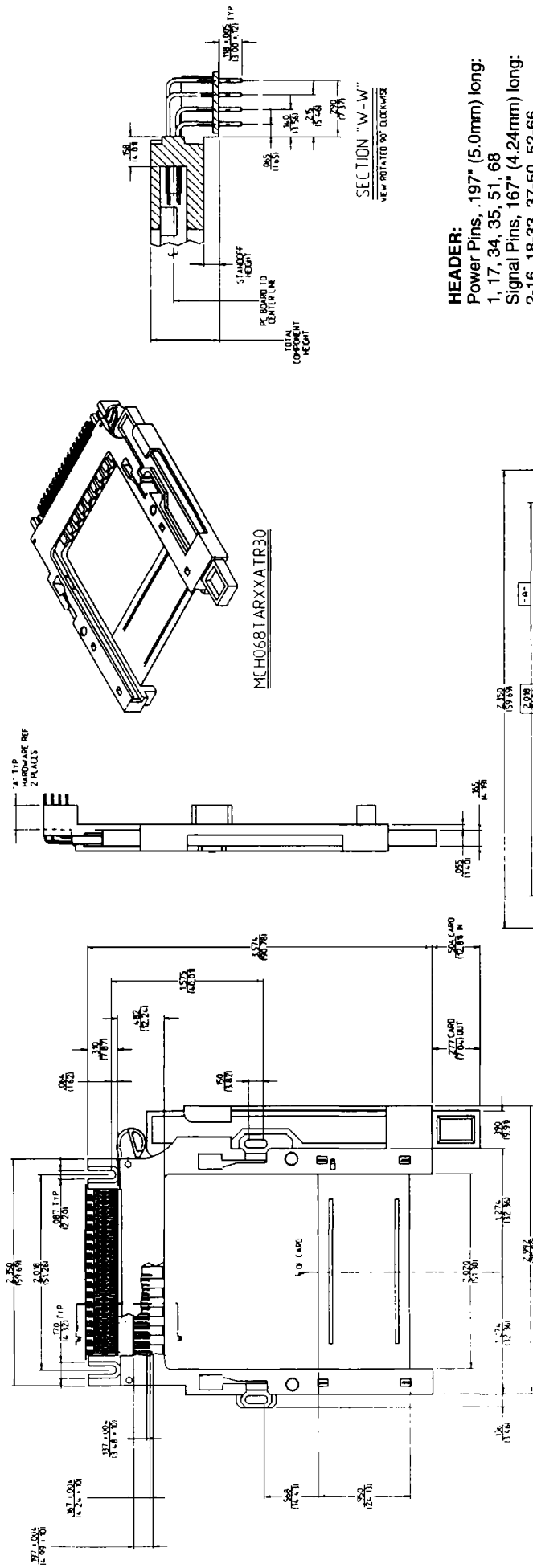


**CUSTOMER DRAWING**

**Robinson Mugent**  
 812/945-0211  
 812/945-0805 FAX

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**MEMPAK™ MCH068TAR01DTR30**  
 68 Position, Top Mount, Right Angle Header  
 Right Eject, with ESD, with Retent Clip



SECTION "W-W"  
VIEW ROTATED 90° CLOCKWISE

**HEADER:**

- Power Pins, .197" (5.0mm) long: 1, 17, 34, 35, 51, 68
- Signal Pins, .167" (4.24mm) long: 2-16, 18-33, 37-50, 52-66
- Detect Pins, .137" (3.48mm) long: 36, 67

**NOTES:**

- All dimensions are in inches. Metric equivalence in parentheses are for reference only.
- All parts packaged in tubes unless requested.
- Available in bottom mount.
- Acquire size M2(0-80 UNC) screws for hold down hardware
- Plated thru holes shall be linked to the PCB grounding path...

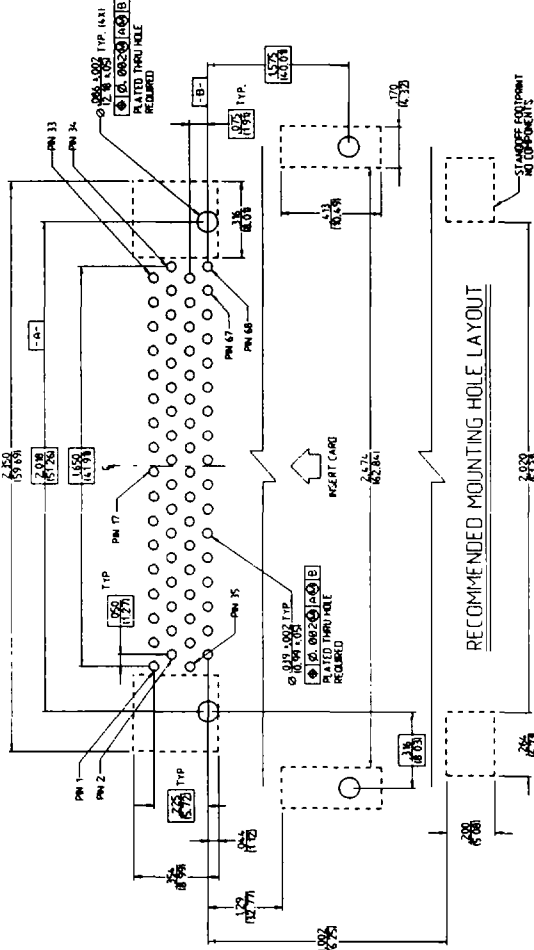
CUSTOMER DRAWING

**Robinson  
Nugent**

812/945-0211  
812/945-0805 FAX

**MEMPAK™ MCH068TARXXATR30**

68 Position, Top Mount, Right Angle Header  
Right Eject, No ESD, No Retent Clip, with Standoffs

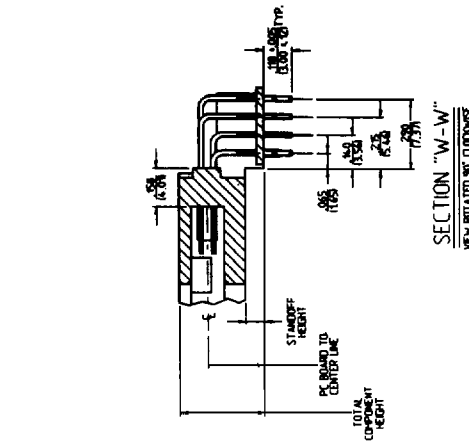


RECOMMENDED MOUNTING HOLE LAYOUT

PART DESCRIPTION	STANDOFF HEIGHT	PC BOARD TO CENTER LINE	TOTAL COMPONENT HEIGHT	DIM 'A' HARDWARE REFERENCE
MCH068TAR05ATR30	.098 (2.50)	.256 (6.50)	.374 (9.50)	.153 (3.89)
MCH068TAR06ATR30	.217 (5.50)	.374 (9.50)	.492 (12.50)	.272 (6.91)

MCH 068 T A R X X A T R 30

- PCB - MEMORY CARD HEADER
- NUMBER OF CONTACTS
- PLATING STYLE
- CONTACT STYLE
- HEADER STYLE
- ESD - ESD PROTECTIVE CLIP
- A - RETENT AND SOLDER RETENT CLIP
- NO ESD PROTECTIVE SINGLE PROFILE
- NO .5mm STANDOFF SINGLE PROFILE
- CONTACT PLATING
- ESD - ESD PROTECTIVE CLIP
- A - RETENT AND SOLDER RETENT CLIP
- NO ESD PROTECTIVE SINGLE PROFILE
- NO .5mm STANDOFF SINGLE PROFILE



SECTION "W-W"  
VIEW ROTATED 90° COUNTERCLOCKWISE

**HEADER:**

- Power Pins, .197" (5.0mm) long:  
1, 17, 34, 35, 51, 68  
Signal Pins, .167" (4.24mm) long:  
2-16, 18-33, 37-50, 52-66  
Detect Pins, .137" (3.48mm) long:  
36, 67

**NOTES:**

- All dimensions are in inches. Metric equivalence in parentheses are for reference only.
- All parts packaged in tubes unless requested.
- Solder retent clip suitable for .040 - .093 PCB.
- Plated thru holes shall be linked to the PCB grounding path.

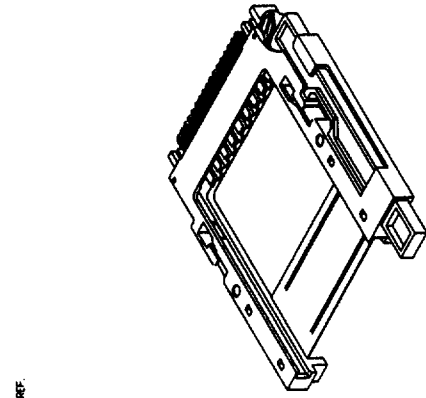
CUSTOMER DRAWING

**Robinson  
Nugent**

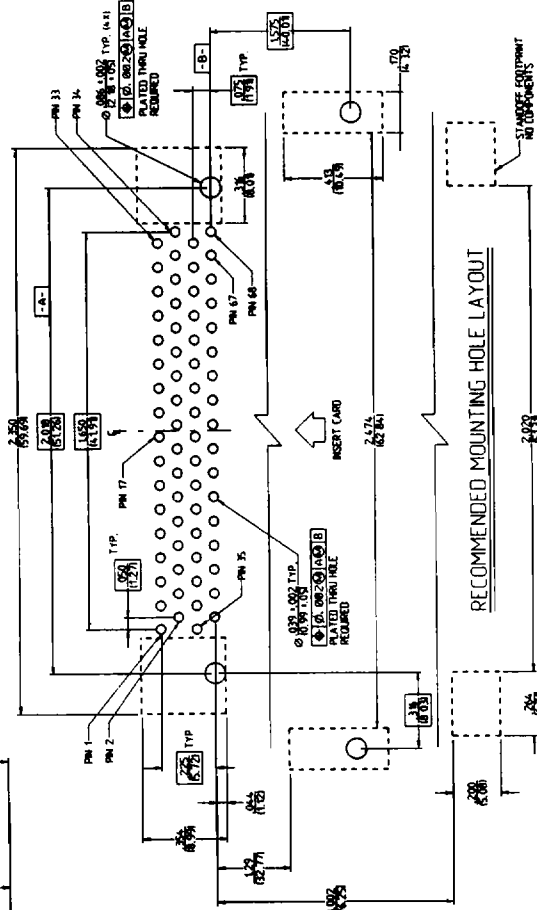
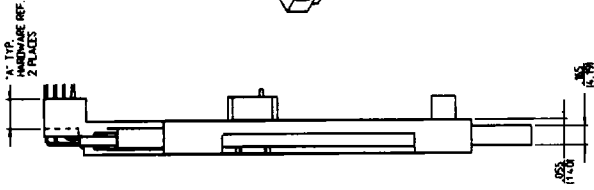
812/945-0211  
812/945-0805 FAX

**MEMPAK™ MCH068TARXXBTR30**

68 Position, Top Mount, Right Angle Header  
Right Eject, No ESD, with Standoffs



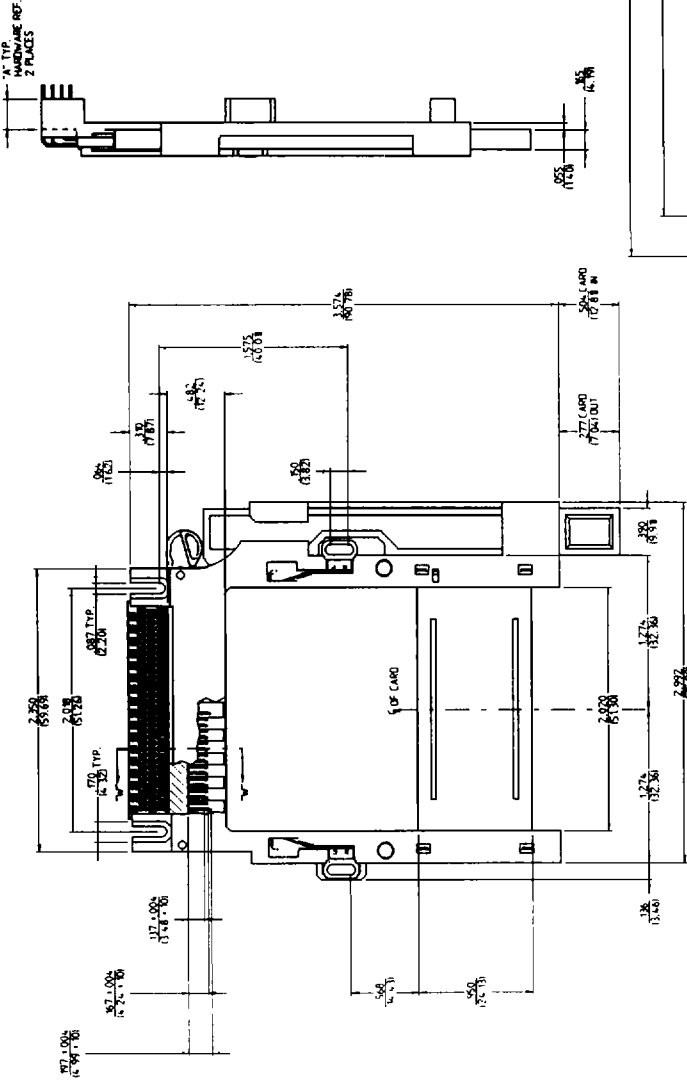
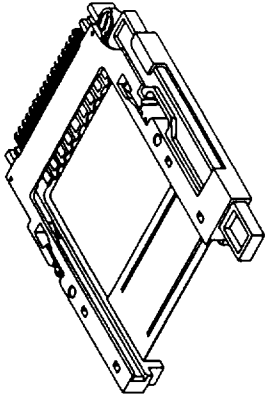
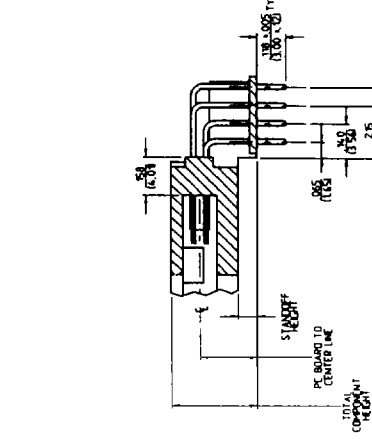
MCH068TARXXBTR30



MCH 068 I A R X X B TR30

- MCH - MEMORY CARD HEADER
- NUMBER OF CONTACTS -
- PLATING STYLE -
- 1 - TOP MOUNT, RIGHT ANGLE
- CONTACT STYLE -
- A - THRU HOLE
- HEADER STYLE -
- R - RIGHT EJECT
- CONTACT PLATING -
- ESD - SOLDER RETENT CLIP
- B - NO ESD, SOLDER RETENT CLIP
- INSULATOR BODY STYLE -
- OR - 5.0mm STANDOFF SINGLE PROFILE
- OR - 6.5mm STANDOFF SINGLE PROFILE

PART DESCRIPTION	STANDOFF HEIGHT	PC BOARD TO CENTER LINE	TOTAL COMPONENT HEIGHT	DM1 'A' HARDWARE REFERENCE
MCH068TAR05BTR30	.098 (2.50)	.256 (6.50)	.374 (9.50)	.153 (3.89)
MCH068TAR06BTR30	.217 (5.50)	.374 (9.50)	.492 (12.50)	.272 (6.91)



**HEADER:**  
Power Pins, .197" (5.0mm) long:  
1, 17, 34, 35, 51, 68  
Signal Pins, 167" (4.24mm) long:  
2-16, 18-33, 37-50, 52-66  
Detect Pins, .137" (3.48mm) long:  
36, 67

**NOTES:**

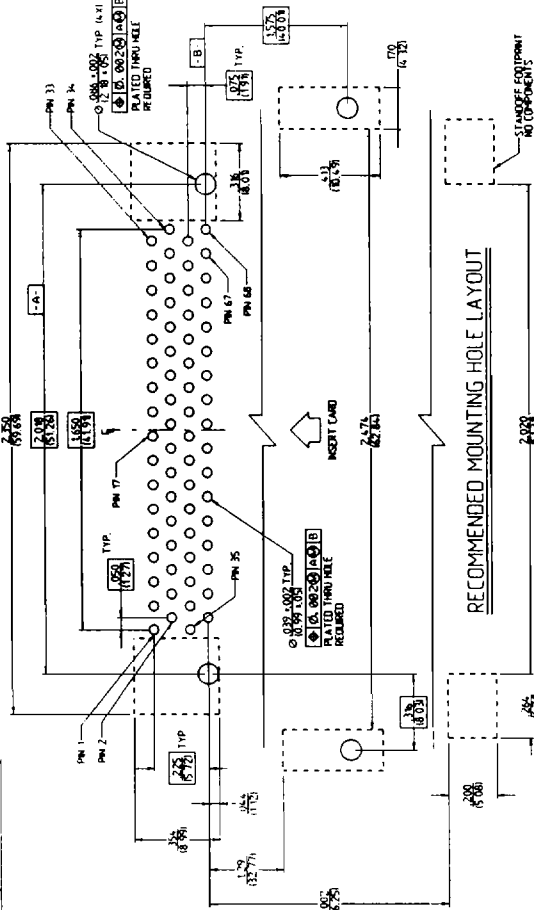
1. All dimensions are in inches. Metric equivalence in parentheses are for reference only.
2. All parts packaged in tubes unless requested.
3. Available in bottom mount.
4. Acquire size M2(0-80 UNC) screws for hold down hardware.
5. Plated thru holes shall be linked to the PCB grounding path.

CUSTOMER DRAWING

**Robinson  
Nugent**

812/945-0211  
812/945-0805 FAX

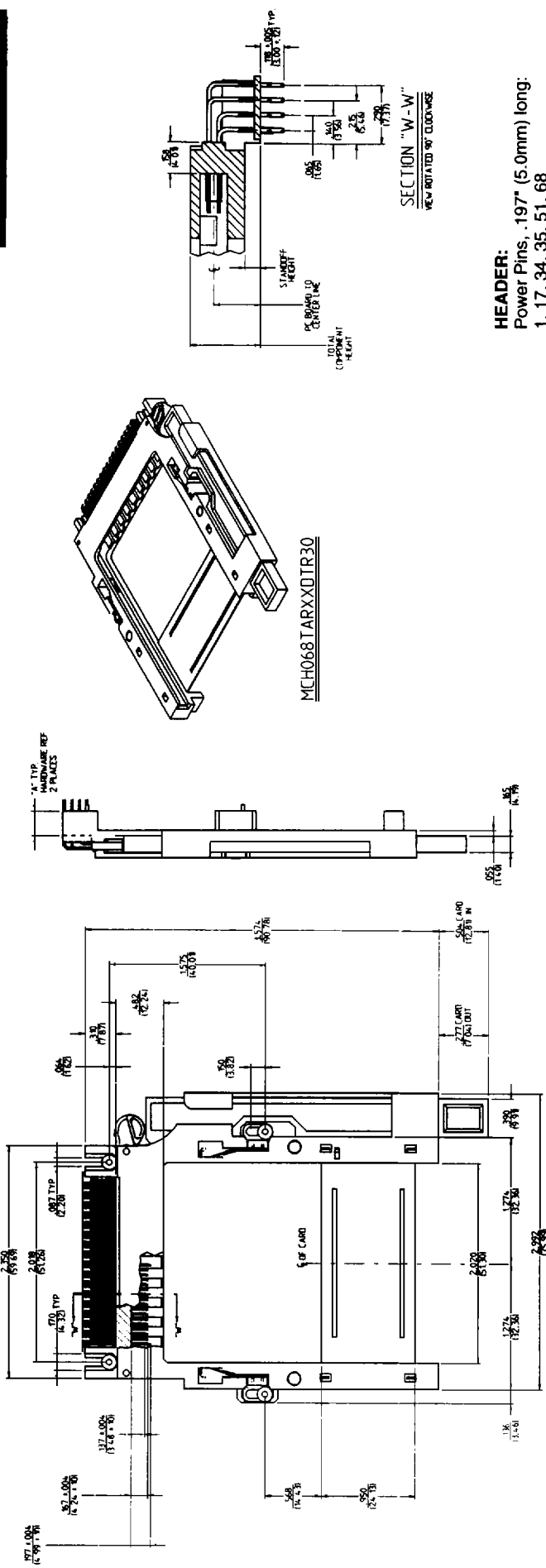
**MEMPAK™ MCH068TARXXCTR30**  
68 Position, Top Mount, Right Angle Header  
Right Eject, with ESD, No Retent Clip, with Standoffs



PART DESCRIPTION	STANDOFF HEIGHT	PC BOARD TO CENTER LINE	TOTAL COMPONENT HEIGHT	DIM 'A' HARDWARE REFERENCE
MCH068TAR05CTR30	.098 (2.50)	.256 (6.50)	.374 (9.50)	.167 (4.24)
MCH068TAR06CTR30	.217 (5.50)	.374 (9.50)	.492 (12.5)	.286 (7.26)

MCH068TARXXCTR30

- 1. 15-POUNT, RIGHT ANGLE
- 2. RIGHT EJECT
- 3. SINGLE PROFILE
- 4. 2.5mm STANDOFF
- 5. INSULATOR BODY STYLE
- 6. ESD / NO SOLDER RETENT LIP
- 7. CONTACT PLATING
- 8. CONTACT STYLE
- 9. NUMBER OF CONTACTS
- 10. MCH068TARXXCTR30



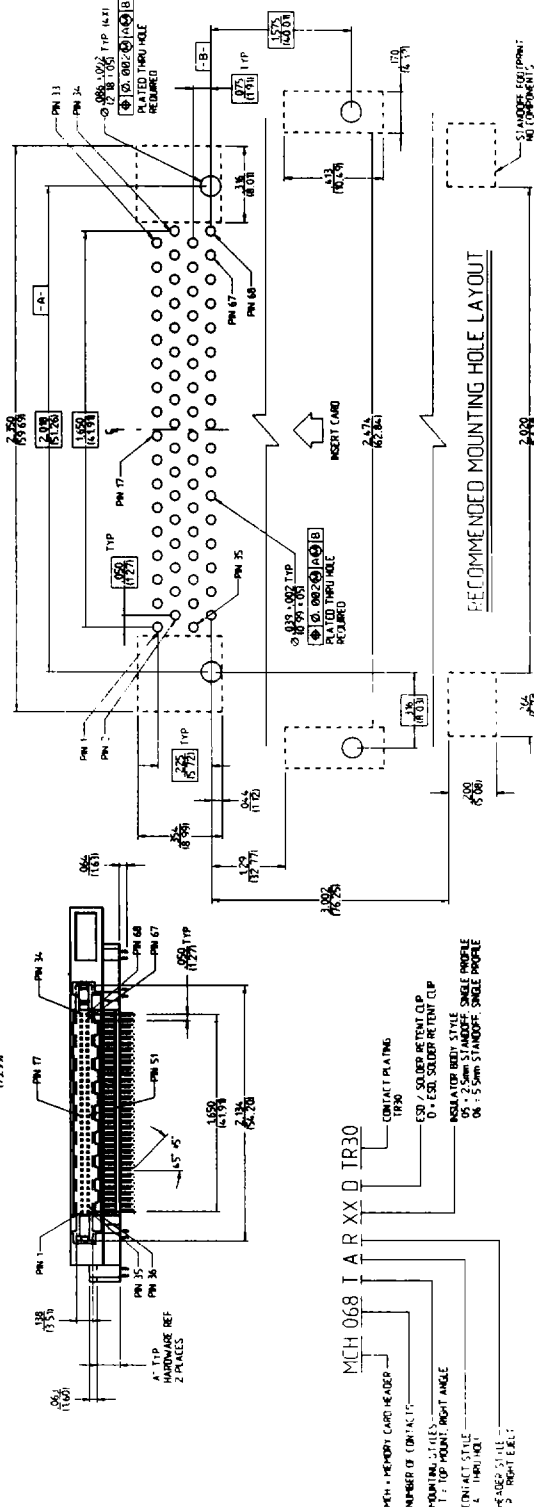
**HEADER:**

- Power Pins, .197" (5.0mm) long: 1, 17, 34, 35, 51, 68
- Signal Pins, .167" (4.24mm) long: 2-16, 18-33, 37-50, 52-66
- Detect Pins, .137" (3.48mm) long: 36, 67

**NOTES:**

- All dimensions are in inches. Metric equivalence in parentheses are for reference only.
- All parts packaged in tubes unless requested.
- Available in bottom mount.
- Solder retent clip suitable for .040 - .093 PCB.
- Plated thru holes shall be linked to the PCB grounding path.

CUSTOMER DRAWING



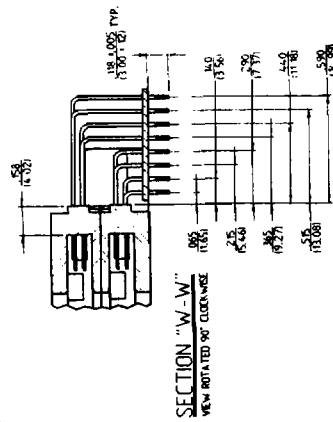
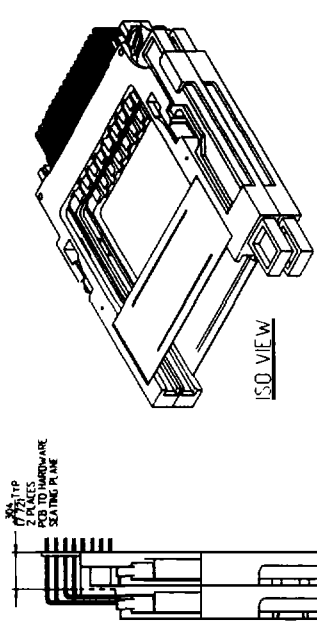
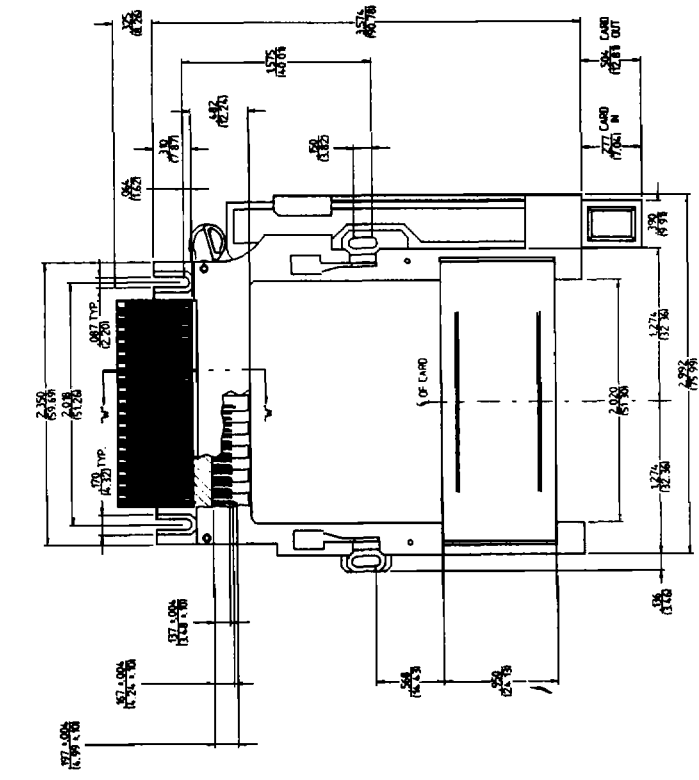
**Robinson  
Nugent**

812/945-0211  
812/945-0805 FAX

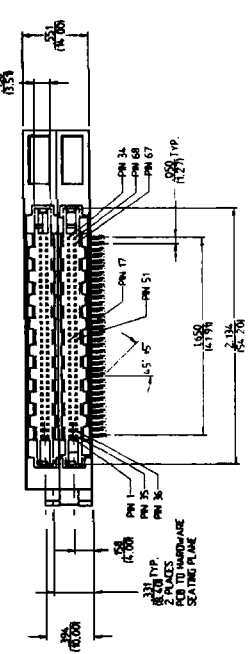
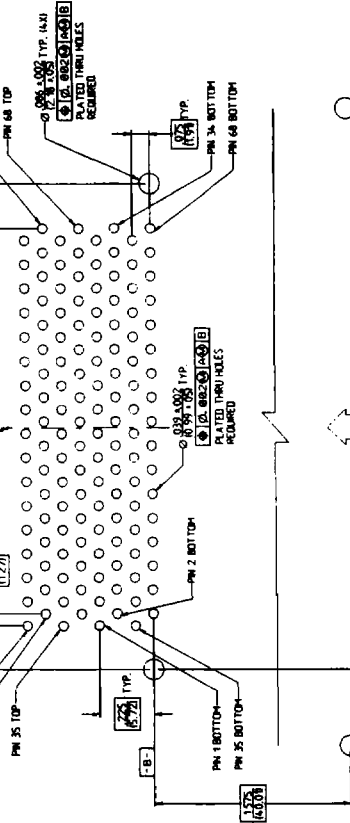
**MEMPAK™ MCH068TARXXDTR30**

68 Position, Top Mount, Right Angle Header  
Right Eject, with Retent Clip, with Standoffs

PART DESCRIPTION	STANDOFF HEIGHT	PC BOARD TO CENTER LINE	TOTAL COMPONENT HEIGHT	DIM "A" HARDWARE REFERENCE
MCH068TAR05DTR30	.098 (2.50)	.256 (6.50)	.374 (9.50)	.167 (4.24)
MCH068TAR06DTR30	.217 (5.50)	.374 (9.50)	.492 (12.5)	.286 (7.26)



**HEADER:**  
 Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67



MCH 136 T A R 21 A [R30]

MCH - MCKEY CARD HEADER  
 NUMBER OF CONTACTS - 17-30  
 CONTACT PLATING - 17-30  
 MOUNTING STYLE - ESD / SOLDER RETENT CLIP OPTION  
 A - NO ESD, NO SOLDER RETENT CLIP  
 CONTACT STYLE - INCL. FOR BODY STYLE  
 A - THROUGH HOLE  
 21 - STANDARD STACKED PROFILE  
 HEADER STYLE -  
 R - RIGHT EJECT

**NOTES:**

- All dimensions are in inches. Metric equivalence in parentheses are for reference only.
- All parts packaged in tubes unless requested.
- Available in bottom mount.
- Acquire size M2(0-80 UNC) screws for hold down hardware.
- Plated thru holes shall be linked to the PCB grounding path.

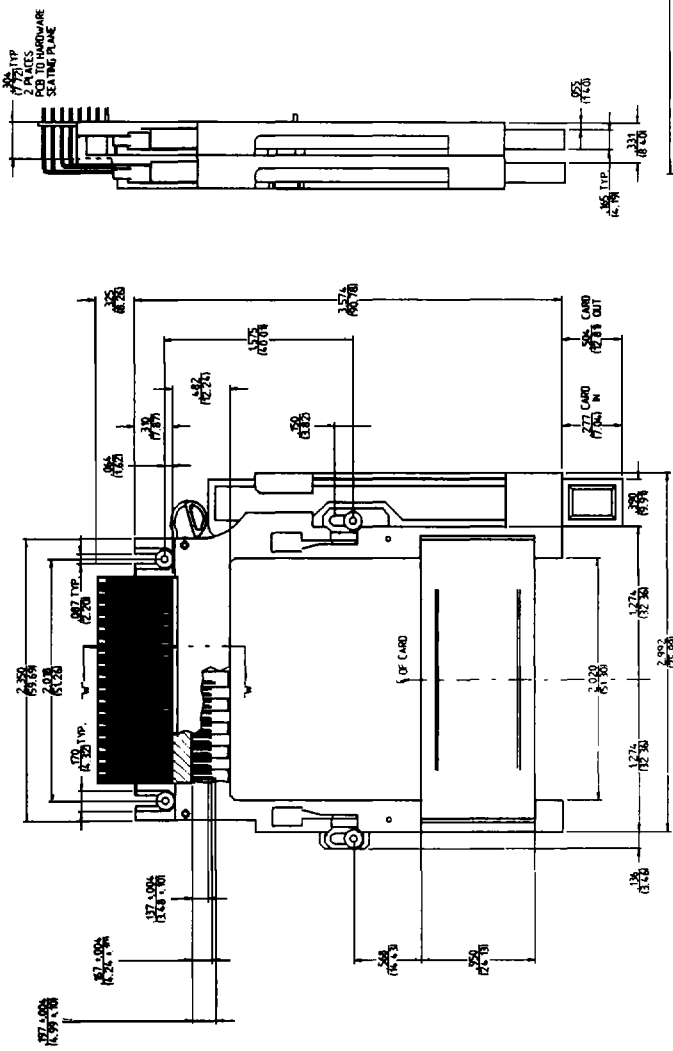
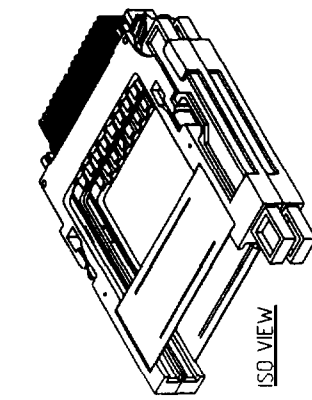
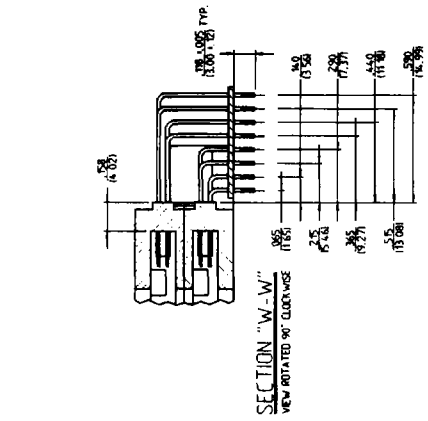
CUSTOMER DRAWING

**Robinson Nugent**

812/945-0211  
812/945-0805 FAX

**MEMPACTM MCH1368TAR21ATR30**  
 136 Position, Top Mount, Right Angle Header  
 Right Eject, No ESD, No Retent Clip, Stacked





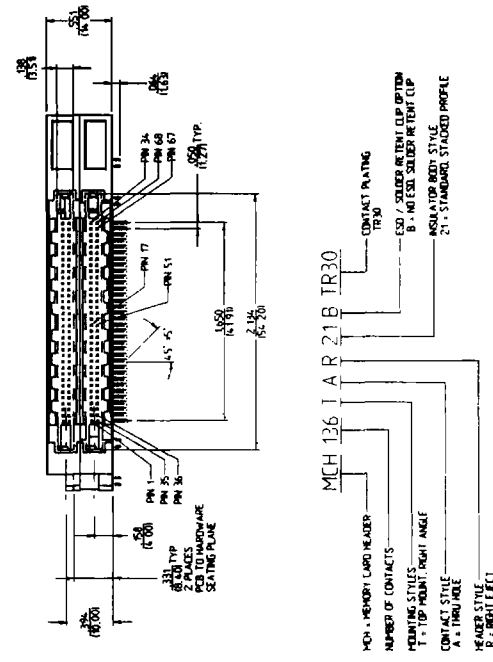
**HEADER:**  
 Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

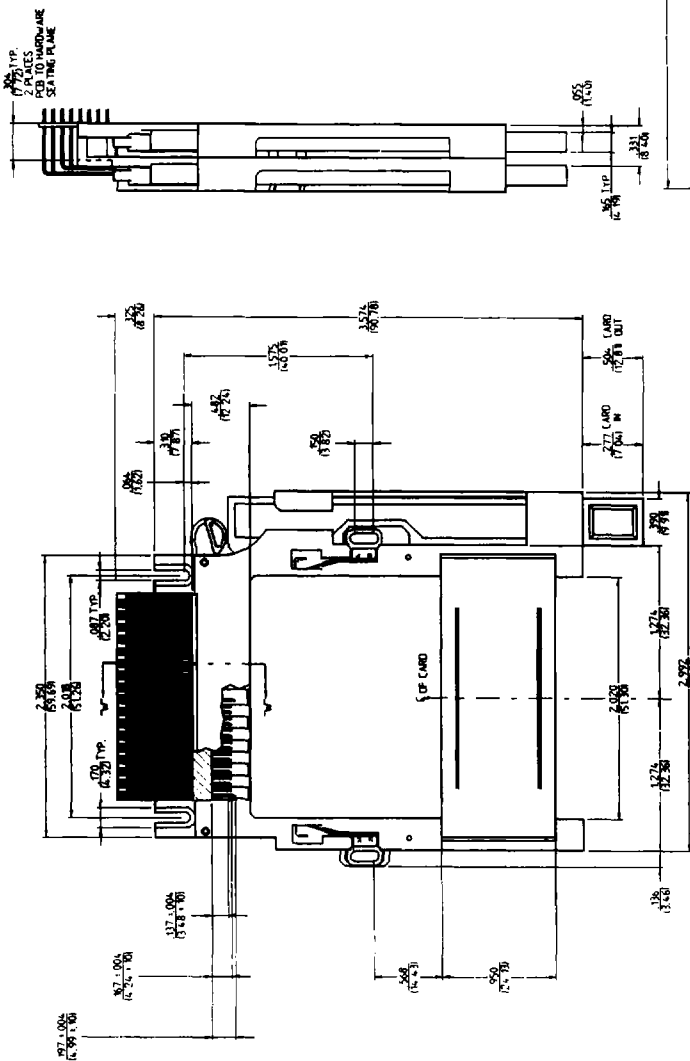
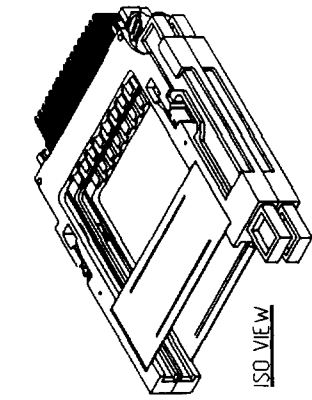
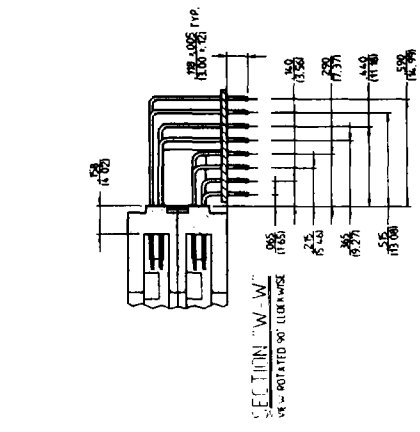
- NOTES:**
1. All dimensions are in inches. Metric equivalents in parentheses are for reference only.
  2. All parts packaged in tubes unless requested.
  3. Available in bottom mount.
  4. Solder retent clip suitable for .040 - .093 PCB.
  5. Plated thru holes shall be linked to the PCB grounding path.

**CUSTOMER DRAWING**

**Robinson Nugent**  
 812/945-0211  
 812/945-0805 FAX

**MEMPAK™ MCH136TAR21BTR30**  
 136 Position, Top Mount, Right Angle Header  
 Right Eject, No ESD, with Retent Clip, Stacked

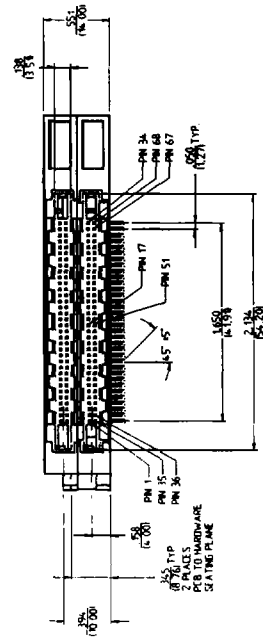
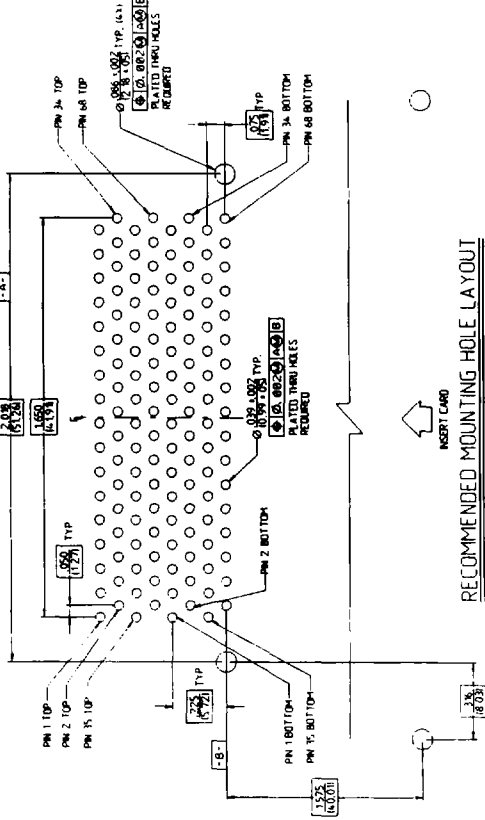




**HEADER:**  
 Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

**NOTES:**

- All dimensions are in inches. Metric equivalence in parentheses are for reference only.
- All parts packaged in tubes unless requested.
- Available in bottom mount.
- Acquire size M2(0-80 UNC) screws for hold down hardware.
- Plated thru holes shall be linked to the PCB grounding path.



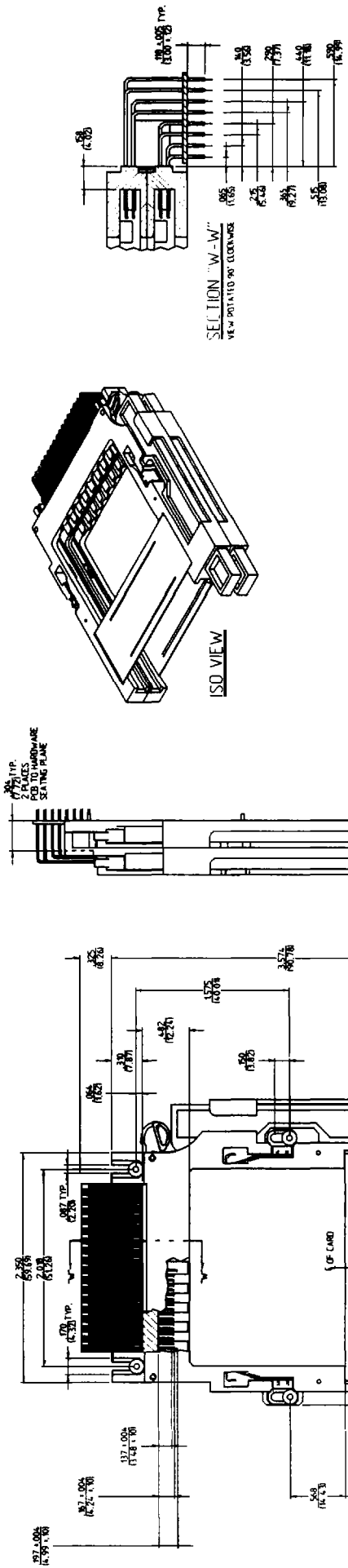
**MCH 136 I A R 21 C IR30**

- MCH - MEMPAK CARD HEADER
- NUMBER OF CONTACTS
- CONTACT STYLE
- CONTACT STYLE
- INSULATOR BODY STYLE
- 21 x STANDARD STACKED PROFILE
- CONTACT PLATING
- TR 30
- ESD STUDES RETENT CLIP BOTTOM
- C - ESD 700 SOLDER RETENT CLIP
- INSULATOR BODY STYLE
- 21 x STANDARD STACKED PROFILE

**CUSTOMER DRAWING**

**Robinson Nugent**  
 812/945-0211  
 812/945-0805 FAX

**MEMPAK™ MCH136TAR21CTR30**  
 136 Position, Top Mount, Right Angle Header  
 Right Eject, with ESD, No Retent Clip, Stacked



**HEADER:**  
 Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

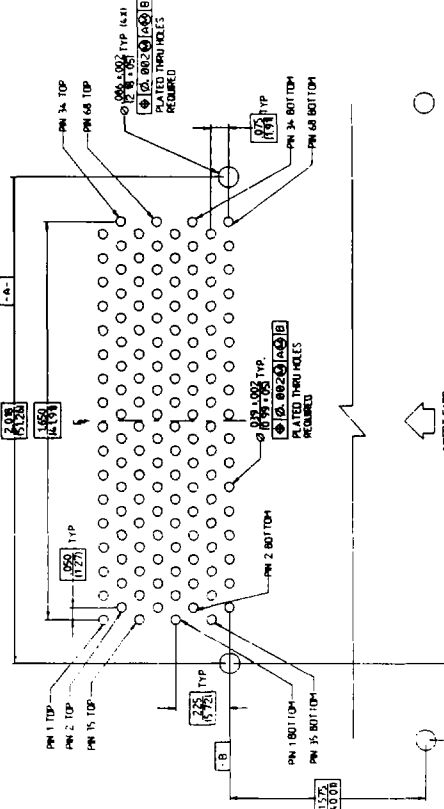
- NOTES:**
1. All dimensions are in inches. Metric equivalence in parentheses are for reference only.
  2. All parts packaged in tubes unless requested.
  3. Available in bottom mount.
  4. Solder retent clip suitable for .040 - .093 PCB.
  5. Plated thru holes shall be linked to the PCB grounding path.1

**CUSTOMER DRAWING**

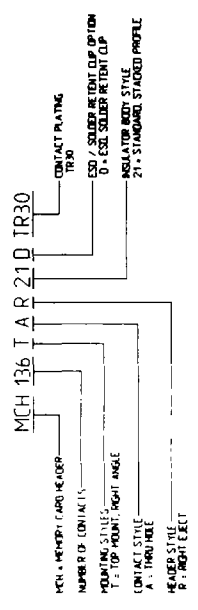
**Robinson Nugent**

812/945-0211  
 812/945-0805 FAX

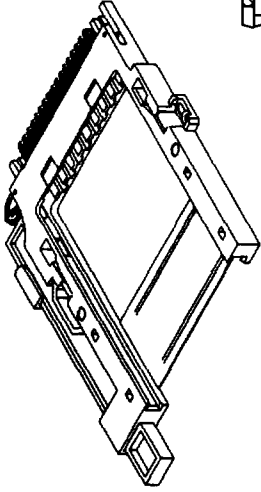
**MEMPAK™ MCH136TAR21DTR30**  
 136 Position, Top Mount, Right Angle Header  
 Right Eject, with Retent Clip, Stacked



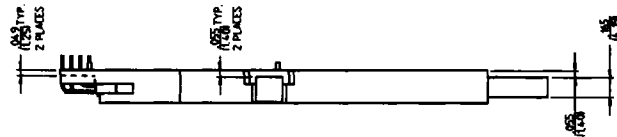
**RECOMMENDED MOUNTING HOLE LAYOUT**







MCH068TALO1BTR30



SECTION "W-W"  
VIEW ROTATED 90° COUNTERCLOCKWISE

**HEADER:**  
 Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

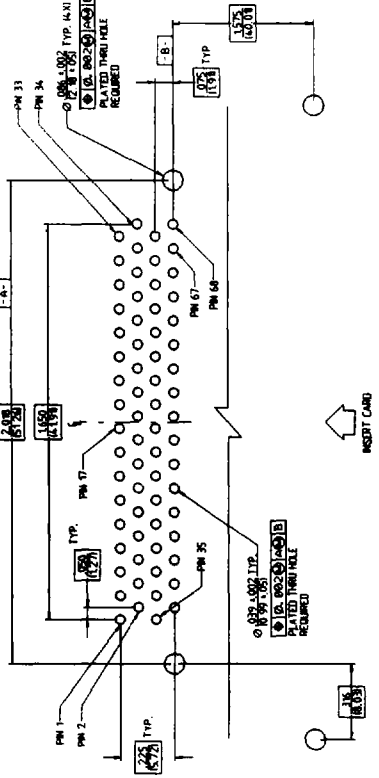
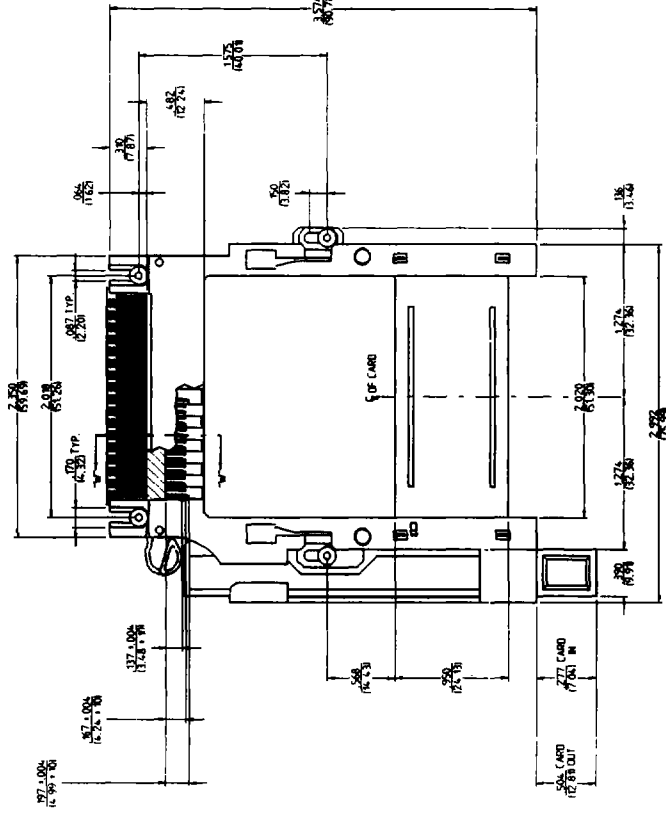
**NOTES:**

1. All dimensions are in inches. Metric equivalence in parentheses are for reference only.
2. All parts packaged in tubes unless requested.
3. Available in bottom mount.
4. Solder retent clip suitable for .040 - .093 PCB.
5. Plated thru holes shall be linked to the PCB grounding path.

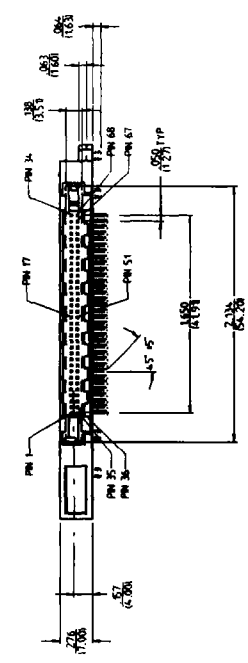
**CUSTOMER DRAWING**

**Robinson Nugent**  
 812/945-0211  
 812/945-0805 FAX

**MEMPAK™ MCH068TALO1BTR30**  
 68 Position, Top Mount, Right Angle Header  
 Left Eject, No ESD, with Retent Clip

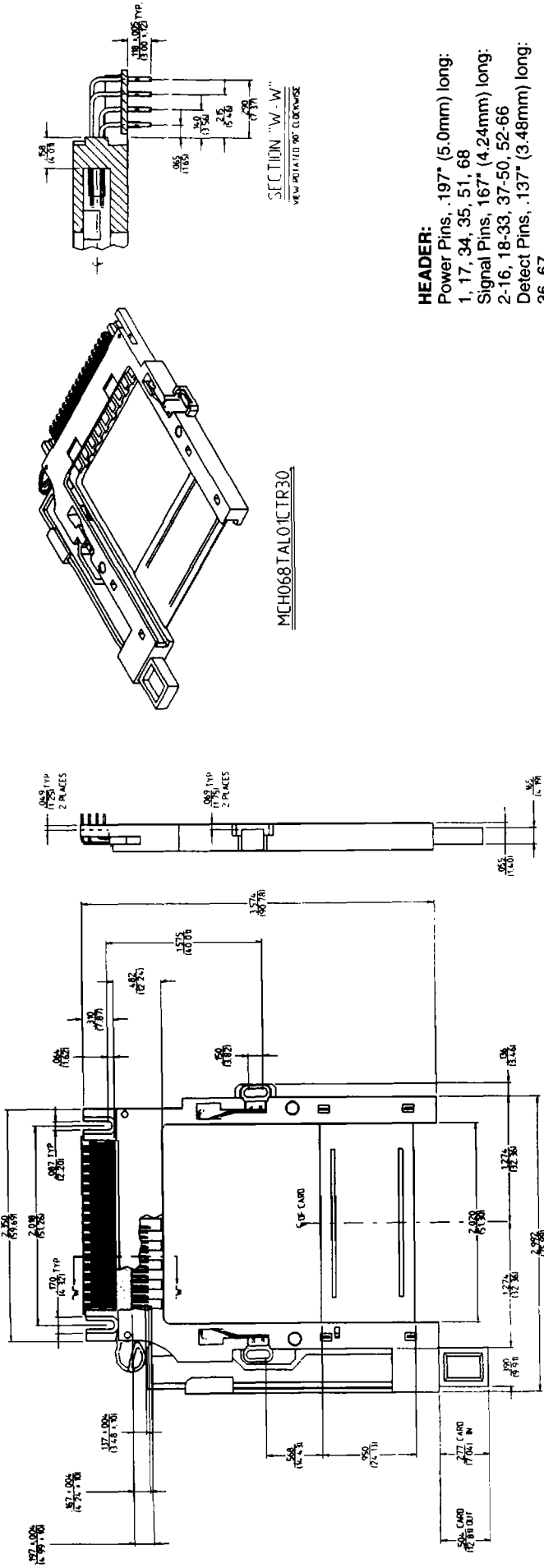


RECOMMENDED MOUNTING HOLE LAYOUT



MCH 068 T A L 01 B TR30

- MCH - MEMPAK CARD HEADER
- CONTACT PLATING
- ESD - SOLDER RETENT CLIP
- B - METAL SOLDER RETENT CLIP
- INSULATOR BODY STYLE
- 01 - STANDARD SINGLE PROBE
- NUMBER OF CONTACTS
- TR30
- MOUNTING STYLE:
- T - TOP MOUNT, RIGHT ANGLE
- B - BOTTOM MOUNT, RIGHT ANGLE
- CONTACT STYLE:
- A - THRU HOLE
- S - LEFT EJECT



MCH068TAL01CTR30

SECTION "W-W"  
VIEW ROTATED 90° COUNTERCLOCKWISE

**HEADER:**

- Power Pins, .197" (5.0mm) long: 1, 17, 34, 35, 51, 68
- Signal Pins, .167" (4.24mm) long: 2-16, 18-33, 37-50, 52-66
- Detect Pins, .137" (3.48mm) long: 36, 67

**NOTES:**

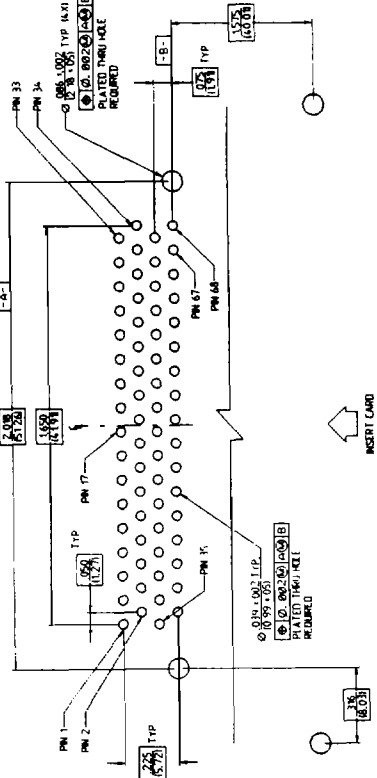
- All dimensions are in inches. Metric equivalence in parentheses are for reference only.
- All parts packaged in tubes unless requested.
- Acquire size M2(0-80 UNC) screws for hold down hardware.
- Plated thru holes shall be linked to the PCB grounding path.

CUSTOMER DRAWING

**Robinson Nugent**

812/945-0211  
812/945-0805 FAX

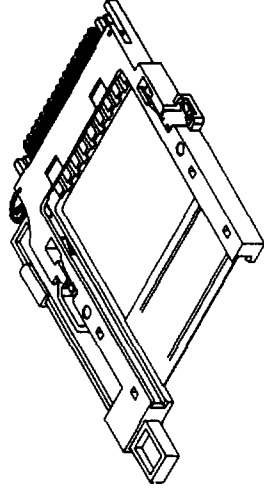
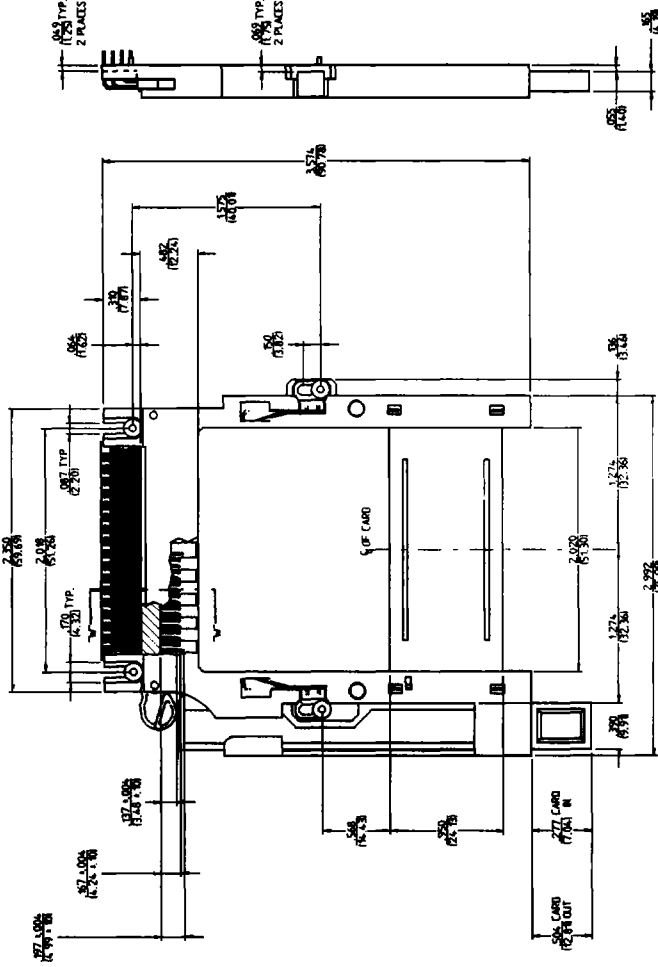
**MEMPAK™ MCH068TAL01CTR30**  
68 Position, Top Mount, Right Angle Header  
Left Eject, with ESD, No Retent Clip



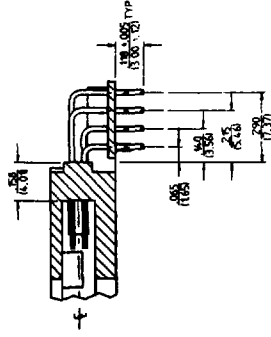
RECOMMENDED MOUNTING HOLE LAYOUT

MCH 068 T A L 0 1 C T R 3 0

- MCH - MEMORY CARD HEADER
- NUMBER OF CONTACTS: TR30
- POINTING STYLE: ESD / SOLDER RETENT CLIP
- T = TOP MOUNT, RIGHT ANGLE
- CONTACT STYLE: A = THROUGH HOLE
- HEADER STYLE: 1 = LEFT EJECT
- CONTACT PLATING: TR30
- ESD / SOLDER RETENT CLIP
- C = ESD, NO SOLDER RETENT CLIP
- INSULATOR BODY STYLE: 01 = STANDARD, SINGLE PROFILE



MCH068TAL01DTR30



**HEADER:**  
 Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

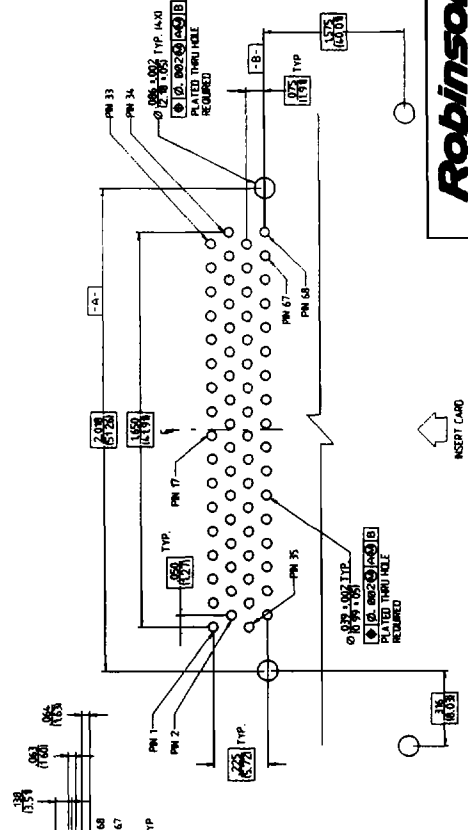
- NOTES:**
- All dimensions are in inches. Metric equivalence in parentheses are for reference only.
  - All parts packaged in tubes unless requested.
  - Available in bottom mount.
  - Solder retent clip suitable for .040 - .093 PCB
  - Plated thru holes shall be linked to the PCB grounding path.

**CUSTOMER DRAWING**

**Robinson Nugent**

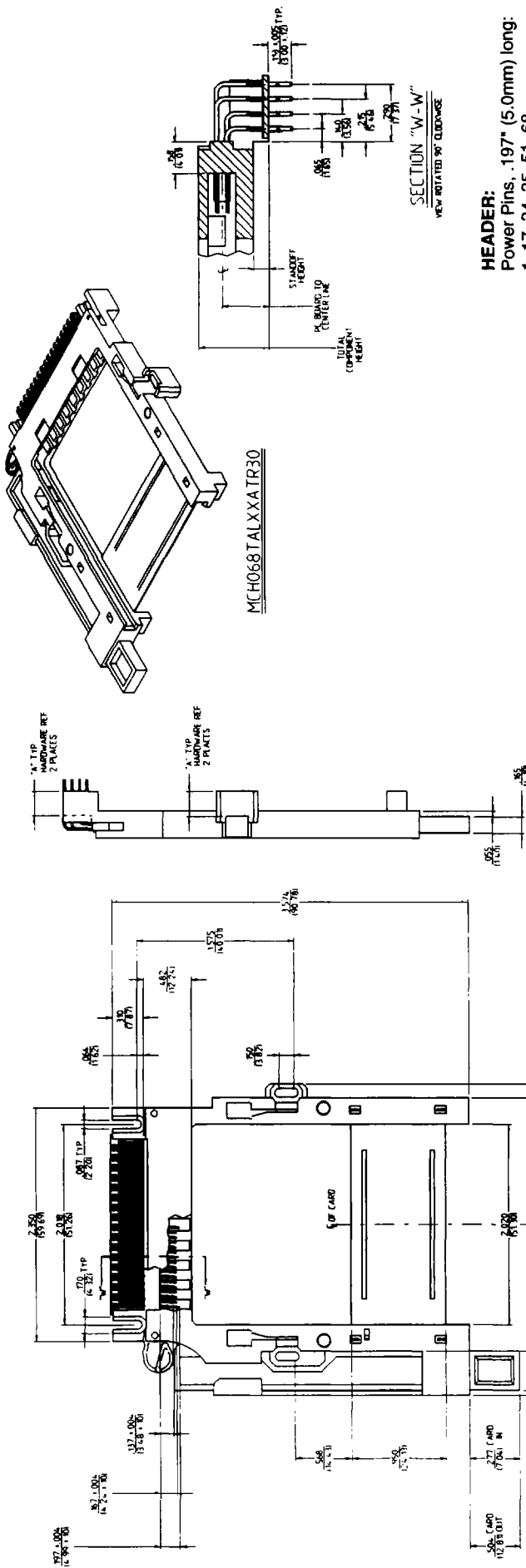
812/945-0211  
 812/945-0805 FAX

**MEMPAK™ MCH068TAL01DTR30**  
 68 Position, Top Mount, Right Angle Headers  
 Left Eject, with Retent Clip



RECOMMENDED MOUNTING HOLE LAYOUT

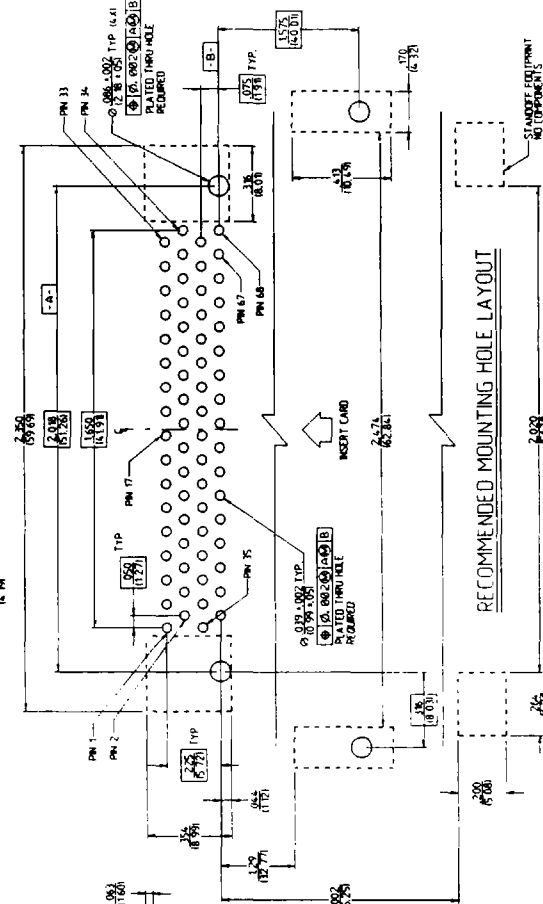
- MCH 068 T A L 0 1 D T R 3 0
- MCH - MEMORY CARD HEADER
  - IMPACT PLATING
  - 1990
  - ESD - SOLDER RETENT CLIP
  - D - USE SOLDER RETENT CLIP
  - INSULATOR BODY STYLE
  - U - 5 POSITION SIGNAL PROBES
  - NUMBER OF CONTACTS
  - MOUNTING STYLES
  - T - TOP MOUNT, RIGHT ANGLE
  - CONTACT STYLE
  - A - THRU HOLE
  - HEADER STYLE
  - L - LEFT EJECT



**HEADER:**  
 Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

- NOTES:**
- All dimensions are in inches. Metric equivalence in parentheses are for reference only.
  - All parts packaged in tubes unless requested.
  - Acquire size M2(0-80 UNC) screws for hold down hardware.
  - Plated thru holes shall be linked to the PCB grounding path.

**CUSTOMER DRAWING**

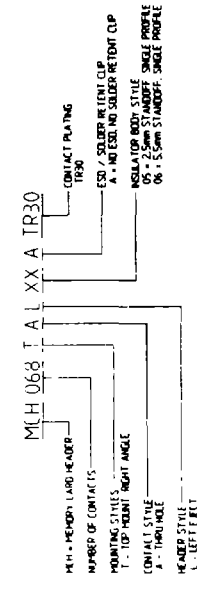


**Robinson  
Nugent**

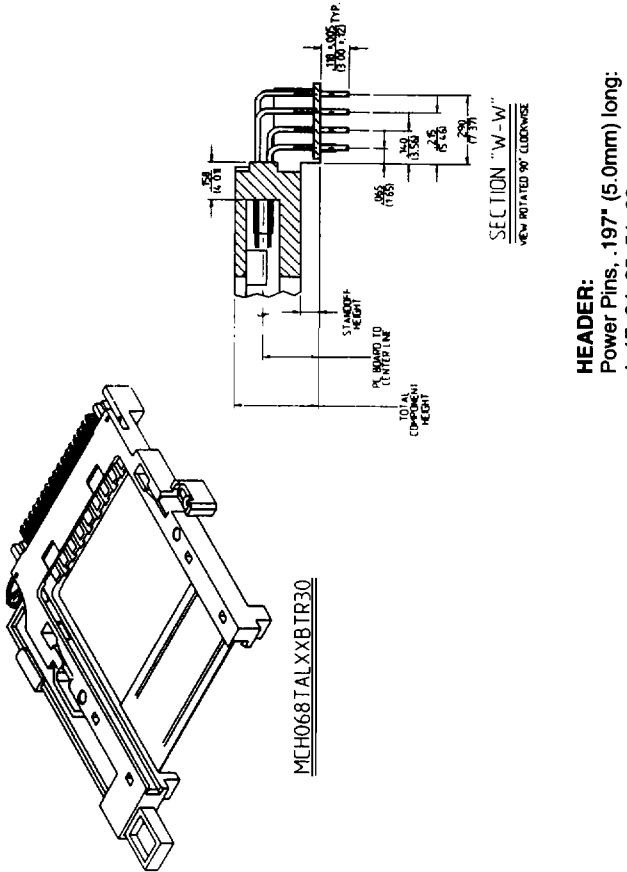
812/945-0211  
 812/945-0805 FAX

**MEMPAK™ MCH068TALXXATR30**  
 68 Position, Top Mount, Right Angle Header  
 Left Eject, No ESD, No Retent Clip, with Standoffs

PART DESCRIPTION	STANDOFF HEIGHT	PC BOARD TO CENTER LINE	TOTAL COMPONENT HEIGHT	DIM "A" HARDWARE REFERENCE
MCH068TAL06ATR30	.098 (2.50)	.256 (6.50)	.374 (9.50)	.153 (3.89)
MCH068TAL06ATR30	.217 (5.50)	.374 (9.50)	.492 (12.50)	.272 (6.91)







**HEADER:**  
 Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Defect Pins, .137" (3.48mm) long:  
 36, 67

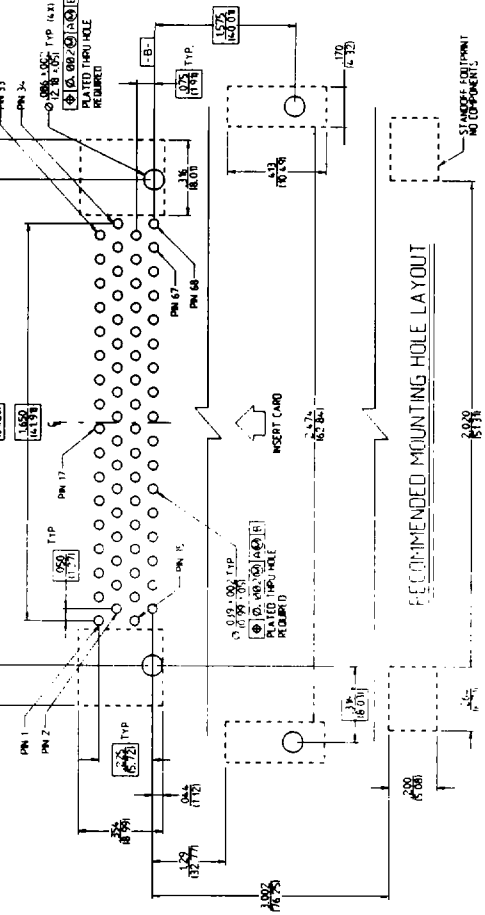
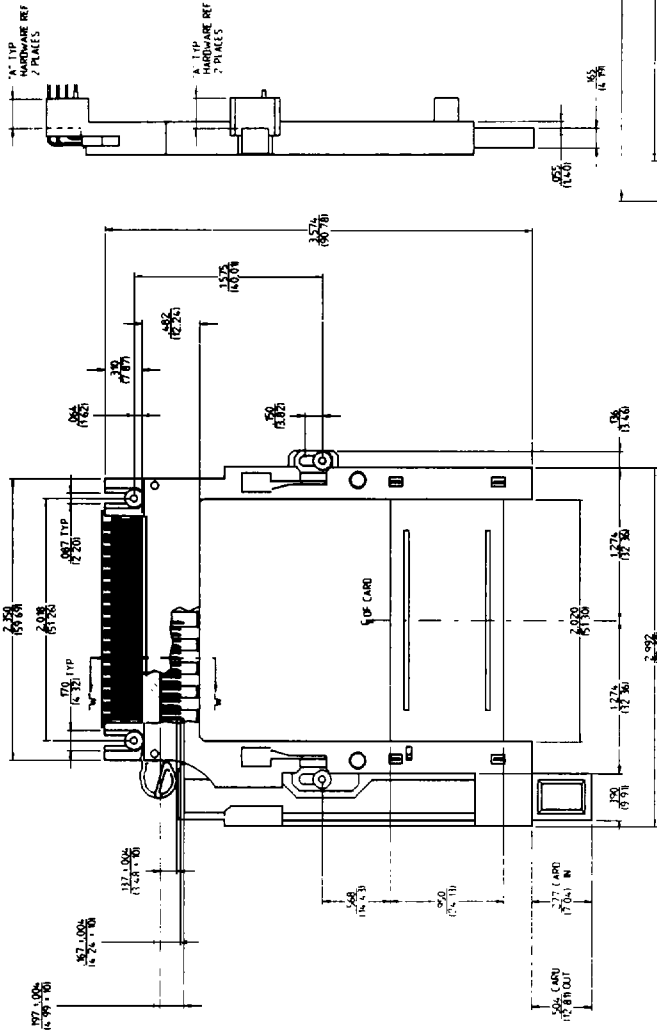
- NOTES:**
1. All dimensions are in inches. Metric equivalence in parentheses are for reference only.
  2. All parts packaged in tubes unless requested.
  3. Available in bottom mount.
  4. Solder retent clip suitable for .040 - .093 PCB.
  5. Plated thru holes shall be linked to the PCB grounding path.

**CUSTOMER DRAWING**

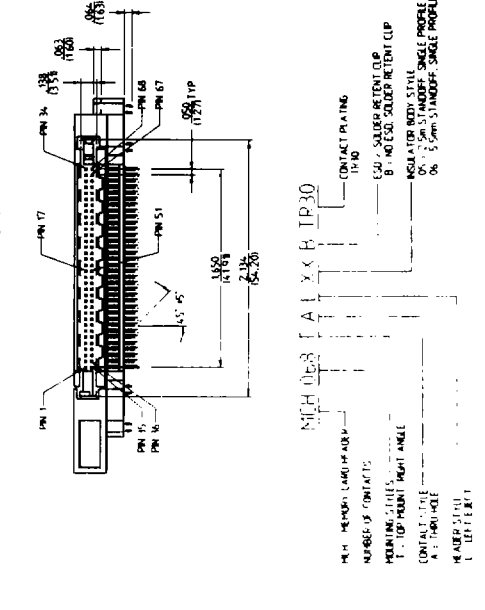
**Robinson Nugent**

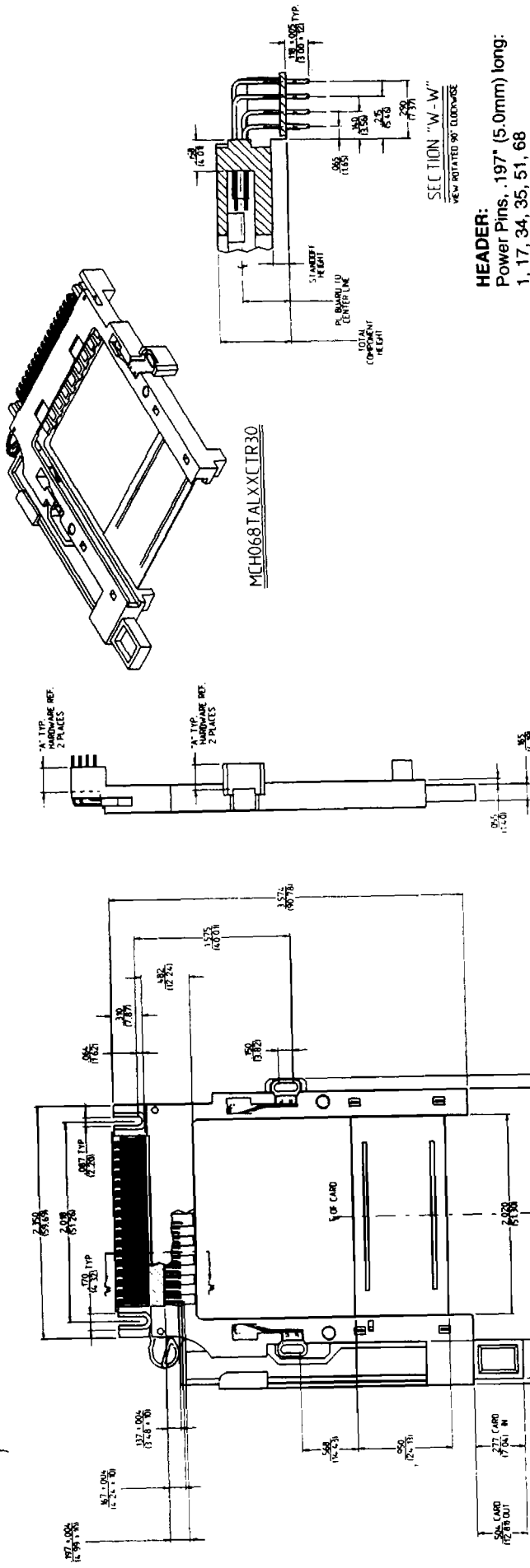
812/945-0211  
 812/945-0805 FAX

**MEMPAK™ MCH068TALXXBTR30**  
 68 Position, Top Mount, Right Angle Header  
 Left Eject, No ESD, with Standoffs



PART DESCRIPTION	STANDOFF HEIGHT	PC BOARD TO CENTER LINE	TOTAL COMPONENT HEIGHT	DIM "A" HARDWARE REFERENCE
MCH068TAL05BTR30	.098 (2.50)	.256 (6.50)	.374 (9.50)	.153 (3.89)
MCH068TAL06BTR30	.217 (5.50)	.374 (9.50)	.492 (12.50)	.272 (6.91)

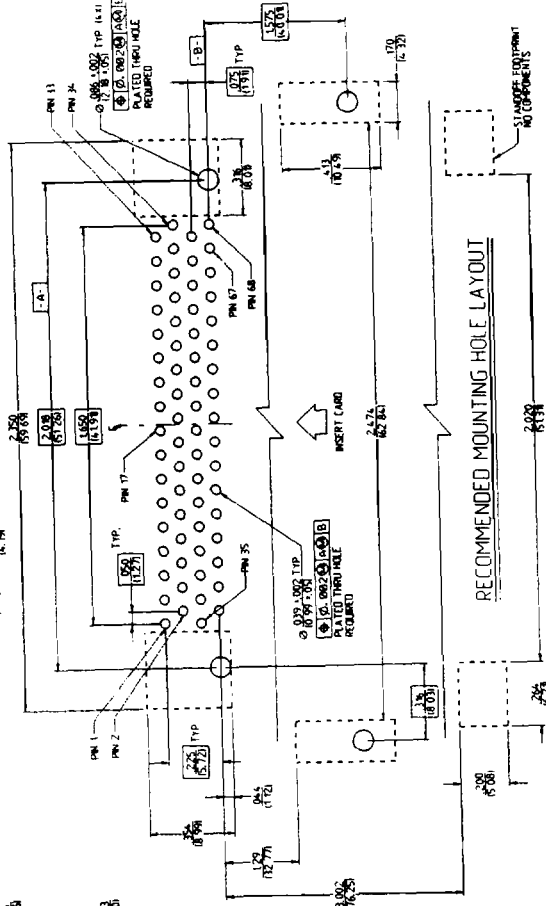




**HEADER:**  
 Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

- NOTES:**
- All dimensions are in inches. Metric equivalence in parentheses are for reference only.
  - All parts packaged in tubes unless requested.
  - Acquire size M2(0-80 UNC) screws for hold down hardware.
  - Plated thru holes shall be linked to the PCB grounding path.

CUSTOMER DRAWING

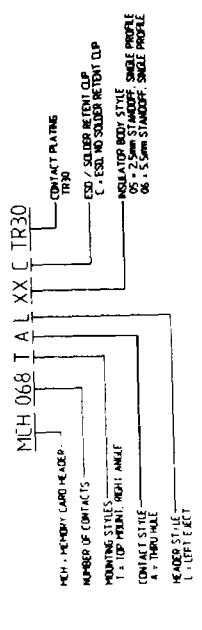


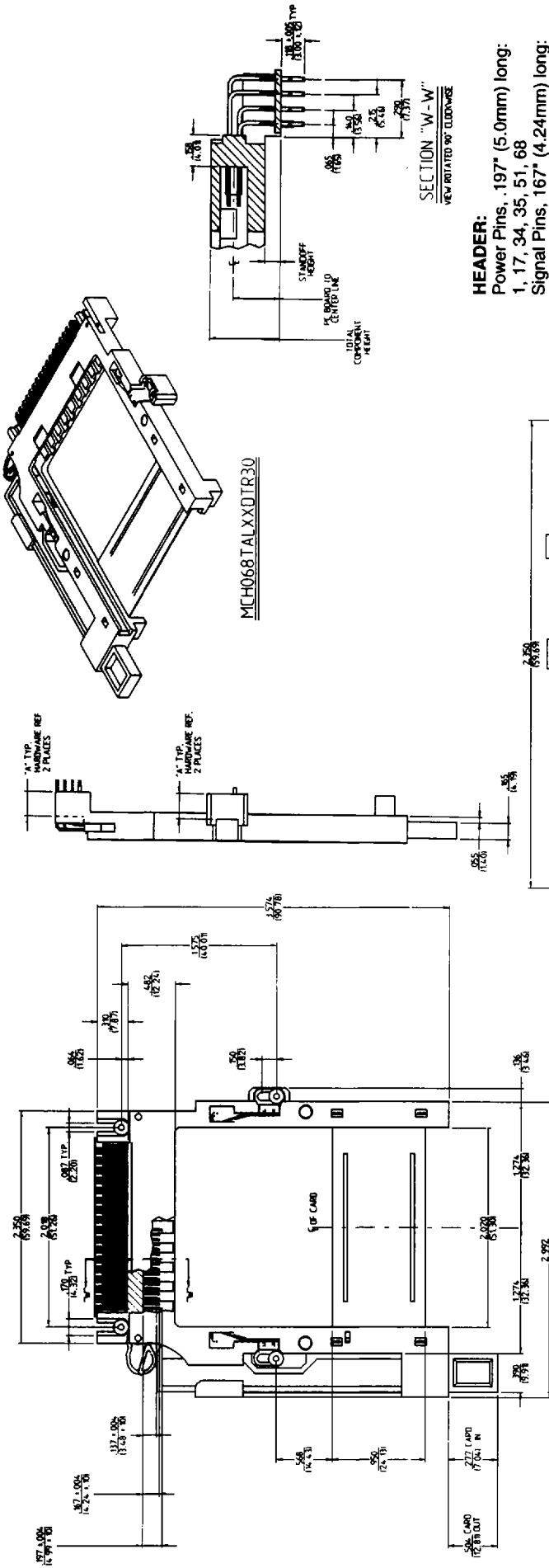
**Robinson Nugent**

**MEMPAK™ MCH068TALXXCTR30**  
 68 Position, Top Mount, Right Angle Header  
 Left Eject, with Standoffs

812/945-0211  
 812/945-0805 FAX

PART DESCRIPTION	STANDOFF HEIGHT	PC BOARD TO CENTER LINE	TOTAL COMPONENT HEIGHT	DIM "A" HARDWARE REFERENCE
MCH068TAL06CTR30	.098 (2.50)	.256 (6.50)	.374 (9.50)	.167 (4.24)
MCH068TAL06CTR30	.217 (5.50)	.374 (9.50)	.492 (12.50)	.286 (7.26)

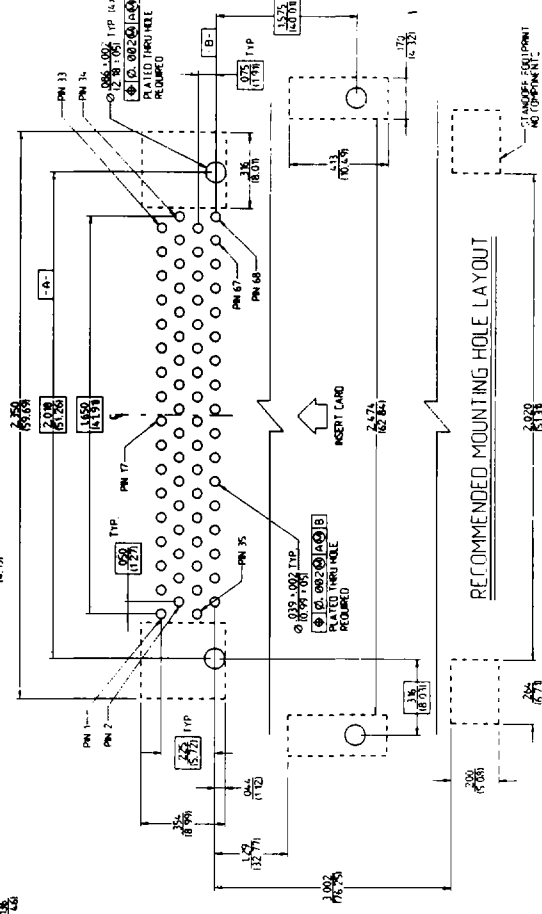




**HEADER:**  
 Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

- NOTES:**
1. All dimensions are in inches. Metric equivalents in parentheses are for reference only.
  2. All parts packaged in tubes unless requested.
  3. Available in bottom mount.
  4. Solder retent clip suitable for .040 - .093 PCB.
  5. Plated thru holes shall be linked to the PCB grounding path.

**CUSTOMER DRAWING**



**Robinson  
Nugent**

812/945-0211  
 812/945-0805 FAX

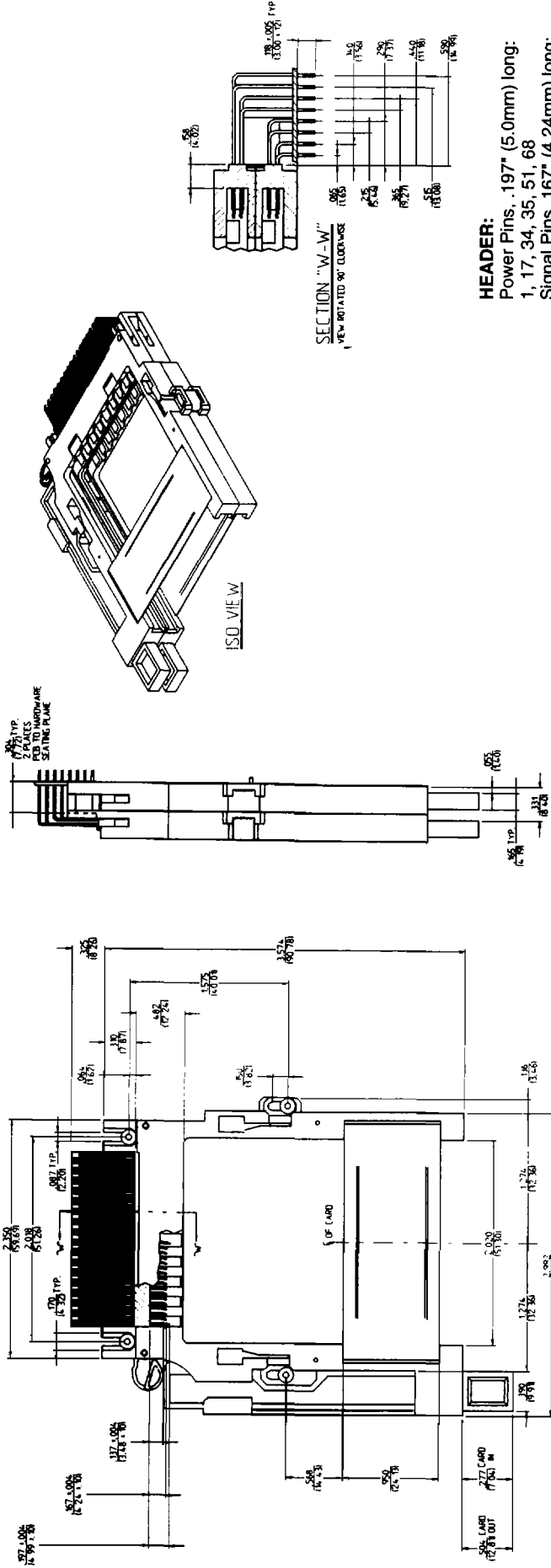
**MEMPAK™ MCH068TALXXDTR30**  
 68 Position, Top Mount, Right Angle Header  
 Left Eject, with ESD, with Retent Clip, with Standoffs

PART DESCRIPTION	STANDOFF HEIGHT	PC BOARD TO CENTER LINE	TOTAL COMPONENT HEIGHT	DIM "A" HARDWARE REFERENCE
MCH068TAL05DTR30	.098 (2.50)	.256 (6.50)	.374 (9.50)	.167 (4.24)
MCH068TAL06DTR30	.217 (5.50)	.374 (9.50)	.492 (12.50)	.286 (7.26)

MCH 068 T A L X X D T R 30

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- 66. NUMBER OF CONTACTS
- 67. NUMBER OF CONTACTS
- 68. NUMBER OF CONTACTS





**HEADER:**  
Power Pins, .197" (5.0mm) long:  
1, 17, 34, 35, 51, 68  
Signal Pins, .167" (4.24mm) long:  
2-16, 18-33, 37-50, 52-66  
Detect Pins, .137" (3.48mm) long:  
36, 67

**NOTES:**

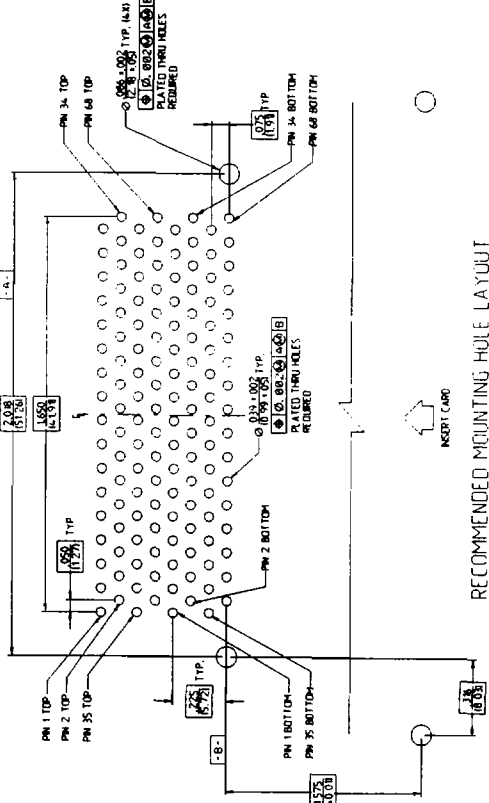
1. All dimensions are in inches. Metric equivalence in parentheses are for reference only.
2. All parts packaged in tubes unless requested.
3. Available in bottom mount.
4. Solder retent clip suitable for .040 - .093 PCB.
5. Plated thru holes shall be linked to the PCB grounding path.

CUSTOMER DRAWING

**Robinson  
Nugent**

812/945-0211  
812/945-0805 FAX

**MEMPAK™ MCH136TAL21BTR30**  
136 Position, Top Mount, Right Angle Header  
Left Eject, No ESD, with Retent Clip, Stacked

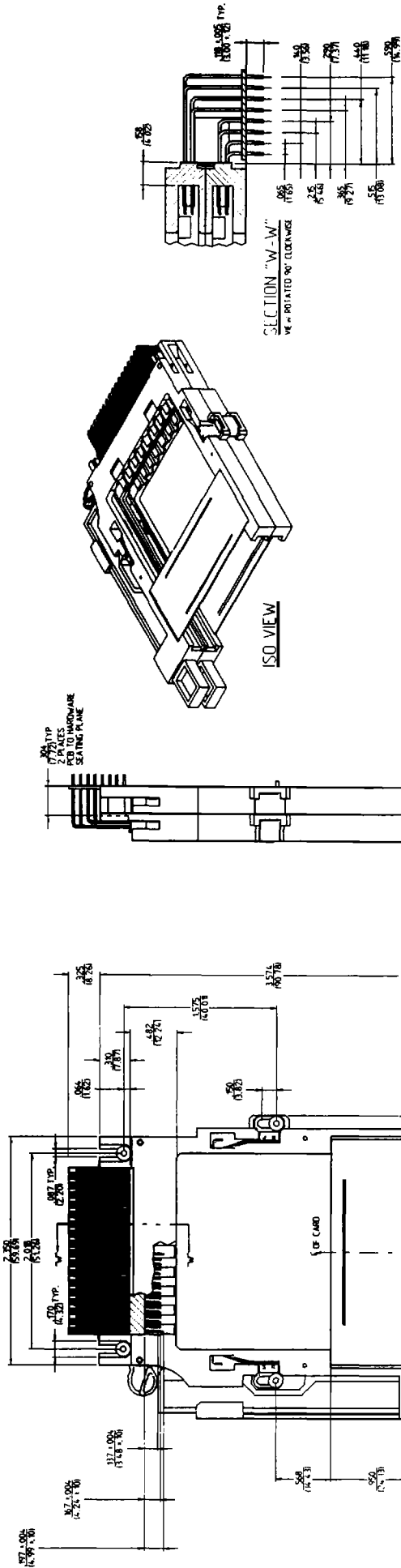


MCH 136 I A L 21 B TR20

MEMPAK™ MEMORY CARD HEADER  
NUMBER OF CONTACTS: 68  
MOUNTING STYLE: T - TOP MOUNT RIGHT ANGLE  
CONTACT STYLE: A - THRU HOLE  
HEADER STYLE: L - LEFT EJECT

CONTACT PLATING: 100%  
EQU - GUNPERF PRINTED ON PWB  
B - PADDED BOTTOM REFIN TIP  
R - GUNPERF SUB-STRATE  
S - STANDARD PADDED PAPER





**HEADER:**  
 Power Pins, .197" (5.0mm) long:  
 1, 17, 34, 35, 51, 68  
 Signal Pins, .167" (4.24mm) long:  
 2-16, 18-33, 37-50, 52-66  
 Detect Pins, .137" (3.48mm) long:  
 36, 67

**NOTES:**

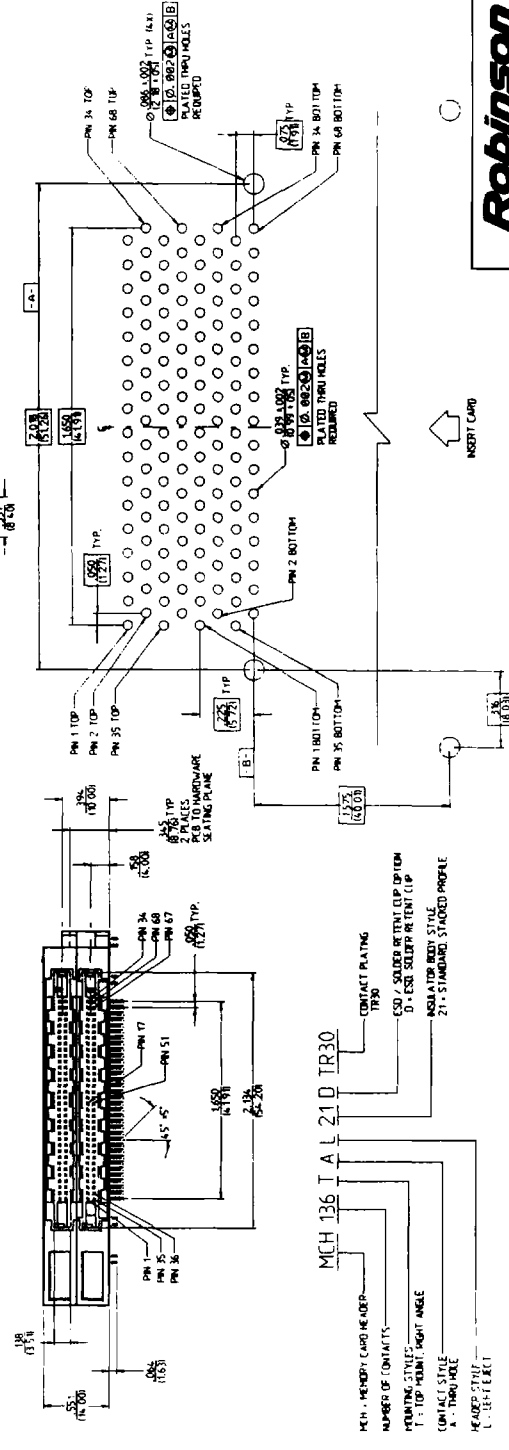
- All dimensions are in inches. Metric equivalence in parentheses are for reference only.
- All parts packaged in tubes unless requested.
- Available in bottom mount.
- Solder retent clip suitable for .040 - .093 PCB.
- Plated thru holes shall be linked to the PCB grounding path.

CUSTOMER DRAWING

812/945-0211  
 812/945-0805 FAX

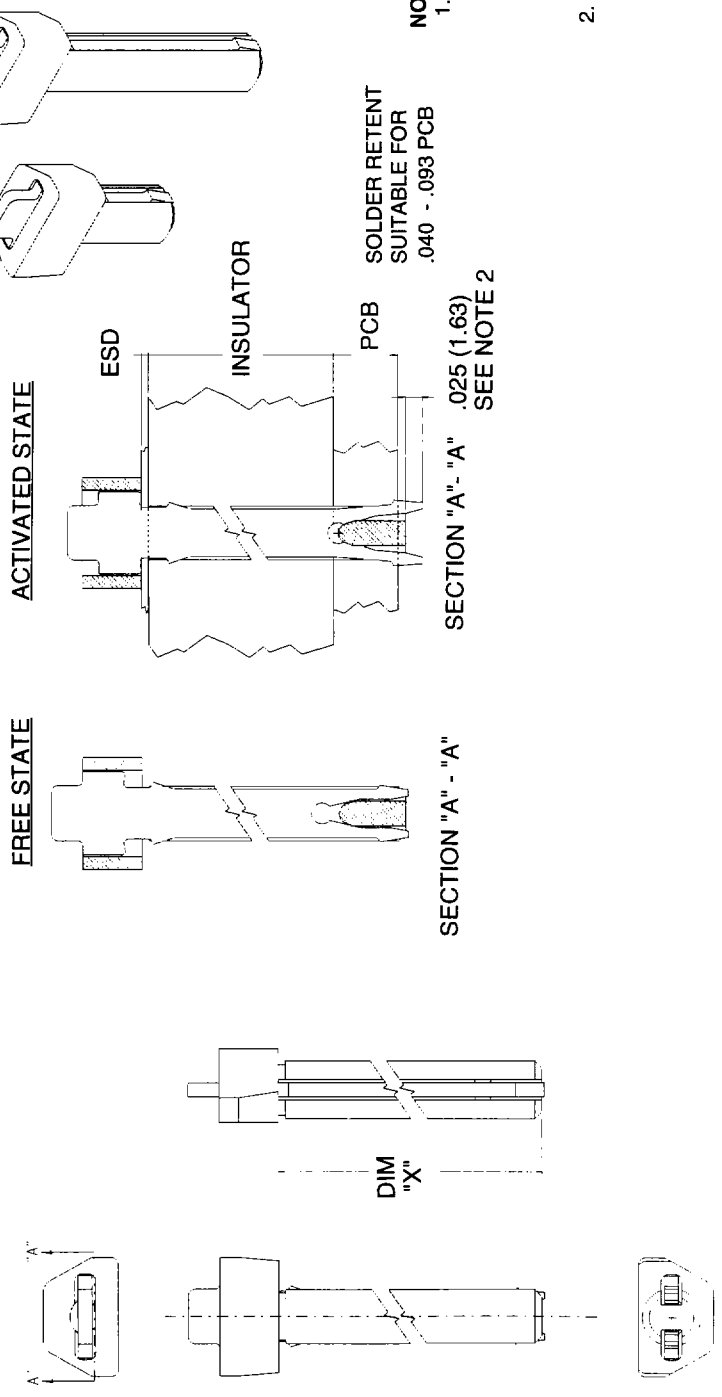
**Robinson  
 Nugent**

**MEMPAK™ MCH136TAL21DTR30**  
 136 Position, Top Mount, Right Angle Header  
 Left Eject, with ESD, with Retent Clip, Stacked



RECOMMENDED MOUNTING HOLE LAYOUT

**Solder Retent Clip  
For PCMCIA Headers**



**SOLDER RETENT  
SUITABLE FOR  
.040 - .093 PCB**

**NOTES:**

1. The material used in the solder retent clip meets the solderability requirements of MIL-STD-202 and is electrically conductive.
2. The distance a solder retent contact protrudes below the solder retent body.

**CUSTOMER DRAWING**

PART DESCRIPTION	DIM. "X"
MCH-RETENT-HD-1	.165
MCH-RETENT-HD-2	.275
MCH-RETENT-HD-3	.380
MCH-RETENT-HD-4	.440
MCH-RETENT-HD-5	.490
MCH-RETENT-HD-6	.530

**Robinson  
Nugent**

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812/945-0805 FAX

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**MEMPAK™ MCH-RETENT-HD-X**  
Solder Retent Clip for PCMCIA Headers