

REV	DESCRIPTION	BY DATE	APPD
D	REVISED PER ECR# 8937	05/01/06 PSM	PSM

CompactPCI® POWER CONNECTOR SYSTEM CODE ORDER CHART

CPCI47S43 - 1 04

CompactPCI® POWER SOCKET CONNECTOR FULLY LOADED WITH STRAIGHT COMPLIANT DC POWER CONTACTS IN POSITIONS 1 THRU 20, STRAIGHT COMPLIANT AC POWER CONTACTS IN POSITIONS 45, 46 & 47 AND STRAIGHT COMPLIANT SIGNAL CONTACTS IN POSITIONS 21 THRU 44

STEP 2 CONTACT PLATING

CODE	DESCRIPTION
A	10 Microinches Gold over Nickel
B	30 Microinches Gold over Nickel

NOTES:

- THIS CONNECTOR WAS DESIGNED TO MEET THE APPLICABLE PERFORMANCE REQUIREMENTS OF PICMG 2.11 R1.0 POWER INTERFACE SPECIFICATION FOR CompactPCI®
- CATALOG NUMBER, DATE CODE AND MANUFACTURING CODE LOCATED APPROXIMATELY AS SHOWN ON SURFACE INDICATED
- FOR COMPLIANT CONTACT PLATED THRU HOLE REQUIREMENTS SEE THRU HOLE PLATING VIEWS. DRILLED HOLE AND FINISHED HOLE ARE CRITICAL DIMENSIONS. COPPER AND TIN-LEAD PLATING THICKNESS TO BE VARIED WITHIN PRINT TOLERANCES, SHOWN TO MEET FINISHED HOLE SIZE CRITERIA. P.C. BOARD THICKNESS - MINIMUM: 3.20/126 NOMINAL; MAXIMUM: 5.60/220 NOMINAL
- 0.25 GAP PERMISSIBLE TO PC BOARD.
- TAIL LENGTHS: POWER = 5.853±0.381/.230±.015, SIGNAL = 4.625±0.381/.182±.015
- OPTIONAL M3 MOUNTING SCREWS SOLD SEPARATELY, WINCHESTER PART NUMBER 26464-01.
- POSITIONS 46 & 47 RECESSED 5mm PER UL1950 PARAGRAPH 2.1.2.
- THIS CONNECTOR DOES NOT REQUIRE ANY SPECIAL TOOLING FOR INSTALLATION INTO THE PC BOARD. THE INSERTION FIXTURE MUST BE FLAT AND OVER LAP THE MATING SURFACE OF THE CONNECTOR.
- FINISH ON SIGNAL CONTACT TERMINATION ENDS IS TIN DIP.

SPECIFICATIONS

MATERIALS

- ① Insulator — Polybutylene Terephthalate (PBT), Color: Gray, UL94V-0 Rated
- ② Size 16 Power Contacts — Copper Alloy
23 Required — Finish: Gold over Nickel
- ③ Size 22 Signal Contacts — Copper Alloy
24 Required — Finish: Gold over Nickel
- ④ Contact Spring — Copper Alloy
23 Required — Finish: Nickel Plate
- ⑤ M3 Mounting Screw — Steel
2 Required — Finish: Nickel Plate

PRELIMINARY PERFORMANCE CHARACTERISTICS

Underwriter's Laboratories Inc. authorization — File# E31650
 Canadian Standards Association authorization — File# E31650
 Low Voltage Directive — 73/23/EEC EC
 Insulation resistance — ≥ 100 Gigaohms
 Initial Contact resistance — 0.7 Milliohms max.
 Power Signal — 4.0 Milliohms max.
 Current rating — 23 Amps AC at 30°C temp rise per IEC512-3, Test 5A
 Power 45,46,47 — 16 Amps DC at 30°C temp rise per IEC512-3, Test 5A
 Power 1-20 — 3 Amps Nominal
 Signal 21-44 — 3 Amps Nominal
 Operating temperature range — -55°C to +125°C
 Voltage Proof — 3000 Vrms
 Power 45,46,47 — 1500 Vrms
 Signal 21-44 — 1000 Vrms
 Minimum Creepage Distance — 3.2 (.126)
 Power 47 to 45 — 3.2 (.126)
 Power 46 to 45 — 2.5 (.098)
 Power 47 to 46 — 6.4 (.252)
 Power 47 to Signal — 6.4 (.252)
 Power 46 to Signal — 2.0 (.079)
 Power 45 to Signal — 2.0 (.079)

COMPLIANT CONTACT

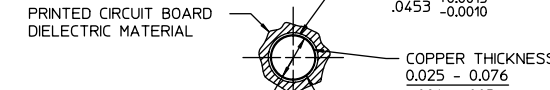
Max Insertion Force — 200.25 N per Contact
 Power Signal — 133.5 N per Contact
 Min Retention Force — 35.6 N per Contact
 Signal — 31.15 N per Contact

MATING & UNMATING FORCE

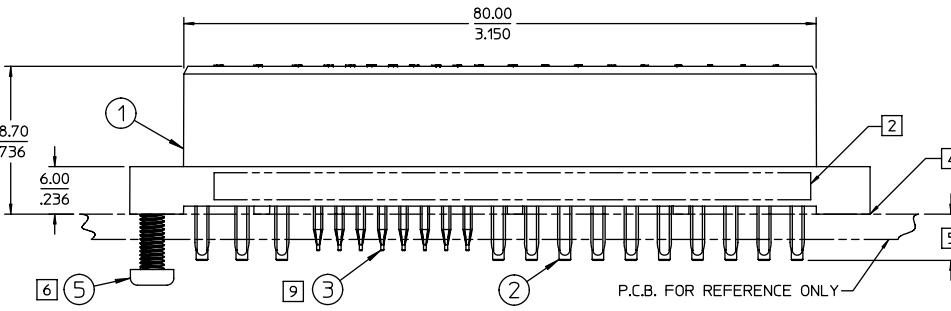
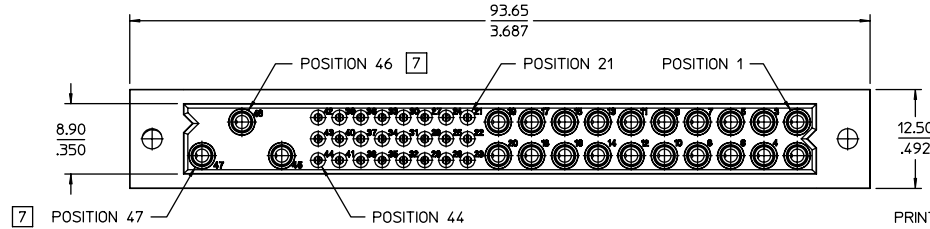
Max Engagement/Separation Force — ≤ 100 N per Connector



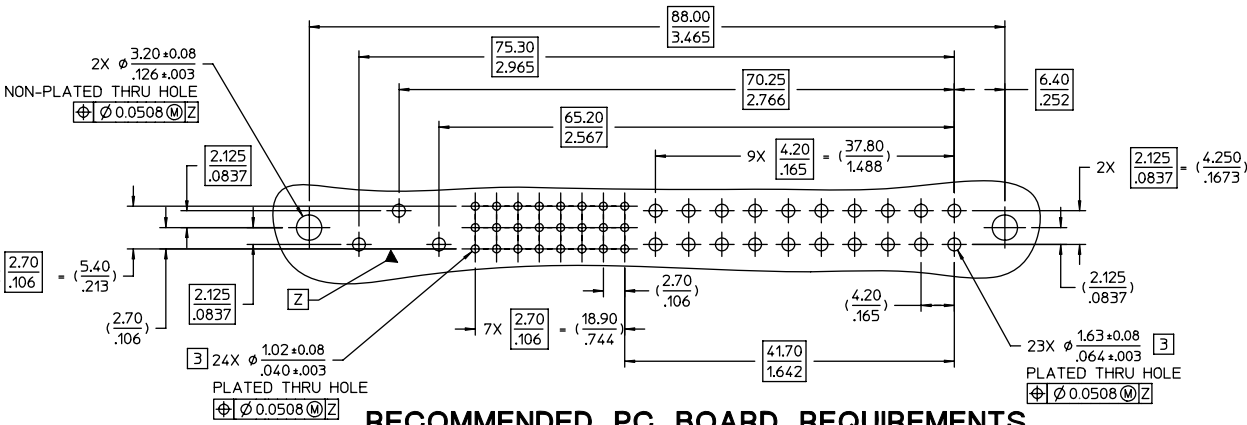
THRU HOLE PLATING for POWER CONTACTS
SCALE: NONE



THRU HOLE PLATING for SIGNAL CONTACTS
SCALE: NONE



CATALOG No. CPCI47S43A104 SHOWN



RECOMMENDED PC BOARD REQUIREMENTS

(COMPONENT SIDE OF BOARD SHOWN)

PER ASME Y14.5M-1994 UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS OR MM/MINCHES TOLERANCES: DECIMALS .XX ± 0.25/.010 .XXX ± 0.050/.0020		<p>NORTHROP GRUMMAN</p> <p>Winchester Electronics</p> <p>82 Barnes Industrial Road North Wallingford, CT 06492</p>
ANGLES ±N/A	SCALE: 1:1	
CUSTOMER DRAWING		<p>TITLE</p> <p>47 POSITION COMPLIANT SOCKET CONNECTOR FOR CompactPCI® (φ.064" P.T.H.)</p>
DRAWN D.J.P. 06/28/02	APPROVED C.W.B. 07/29/02	
APPROVED K.P. 07/22/02	APPROVED M.R.S. 07/26/02	<p>REV. D</p> <p>26461</p> <p>SHT. 1 of 1</p>

June 2006 - This drawing became the property of Winchester Electronics Corporation, Wallingford, CT.