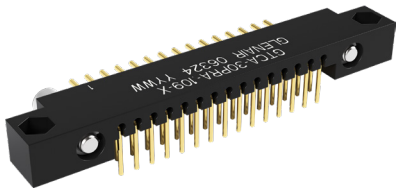
Rectangular I/O and Printed Circuit Board Connectors

GTCA-RA right angle PCB connector with solder cup terminated pin contacts, mounting ears and .075" spacing



GTCA-RA Series rectangular size #24 right angel PCB plugs are designed for use with printed circuit sub-assemblies requiring single-sided, double-sided, and multilayer printed wiring in accordance with MIL-DTL-55302. PCB Connector features PC tail termination with pin contacts on .075" centers. Terminals are solder-dipped in 60/40 tin lead and available with optional gold-plated terminals. Parts are manufactured from non-magnetic materials.

HIGH DENSITY

NOTES

1. Refer to drawing GTC for hardware option details on page 46
2. Refer to drawing GTC for PCB footprints on page 49
3. Performance specifications:
   - Current Rating: 3 AMP
   - DWV: 750 VAC sea level
   - Insulation resistance: 5000 megohms minimum @ 500 VDC
   - Contact resistance: 7 milliohms
   - Operating temperature: -65° C. to +125°C.
   - Mating force (Max): (4 Ounces) X (# of Contacts)
   - Durability: 2000 Mating Cycles
4. Materials and Finishes
   - Insulator: polyphenylene sulfide (PPS) or liquid crystal polymer (LCP)
   - Contacts: copper alloy, gold over nickel plating
   - Hardware: copper alloy, nickel plated and/or 300 series stainless steel, passivated

HOW TO ORDER

Sample Part Number	GTCA	-90	P	RA	-.109	-X	-513

Series	**GTCA** = PCB connector with mounting ears, .075" spacing
Contact Layout	**-10**, **-20**, **-30**, **-40**, **-50**, **-60**, **-70**, **-80**, **-90**, **-100**
Contact Type	**P** = PIN
Termination Type	**RA** = PCB right angle; see termination detail below
Terminal Length	Length in inches ±.010 **-.109, -.140, -.172**
Hardware Option See note 1	Omit for none **-X** = guideset, full round **-Y-#** = guideset, polarized **-F** = fixed jackset **-S** = turning jackset, slotted head **-N** = turning jackset, hex head, long **-M** = turning jackset, slotted head, medium long **-L** = turning jackset, slotted head, long
Gold-Plated Terminal Mod Code	Terminals are solder-dipped in 60/40 tin-lead solder. For gold-plated terminals, add code **-513**

DIMENSIONS

Contact Layout	A	B	C	D	E
-10	0.798 (20.27)	0.618 (15.70)	0.300 (7.62)	0.968 (24.59)	1.138 (28.91)
-20	1.173 (29.79)	0.993 (25.22)	0.675 (17.15)	1.343 (34.11)	1.513 (38.43)
-30	1.548 (39.32)	1.368 (34.75)	1.050 (26.67)	1.718 (43.64)	1.888 (47.96)
-40	1.923 (48.84)	1.743 (44.27)	1.425 (36.20)	2.093 (53.16)	2.263 (57.48)
-50	2.298 (58.37)	2.118 (53.80)	1.800 (45.72)	2.468 (62.69)	2.638 (67.01)
-60	2.673 (67.89)	2.493 (63.32)	2.175 (55.25)	2.843 (72.21)	3.013 (76.53)
-70	3.048 (77.42)	2.868 (72.85)	2.550 (64.77)	3.218 (81.74)	3.388 (86.06)
-80	3.423 (86.94)	3.243 (82.37)	2.925 (74.30)	3.593 (91.26)	3.763 (95.58)
-90-	3.798 (96.47)	3.618 (91.90)	3.300 (83.82)	3.968 (100.79)	4.138 (105.11)
100	4.173 (105.99)	3.993 (101.42)	3.675 (93.35)	4.343 (110.31)	4.513 (114.63)

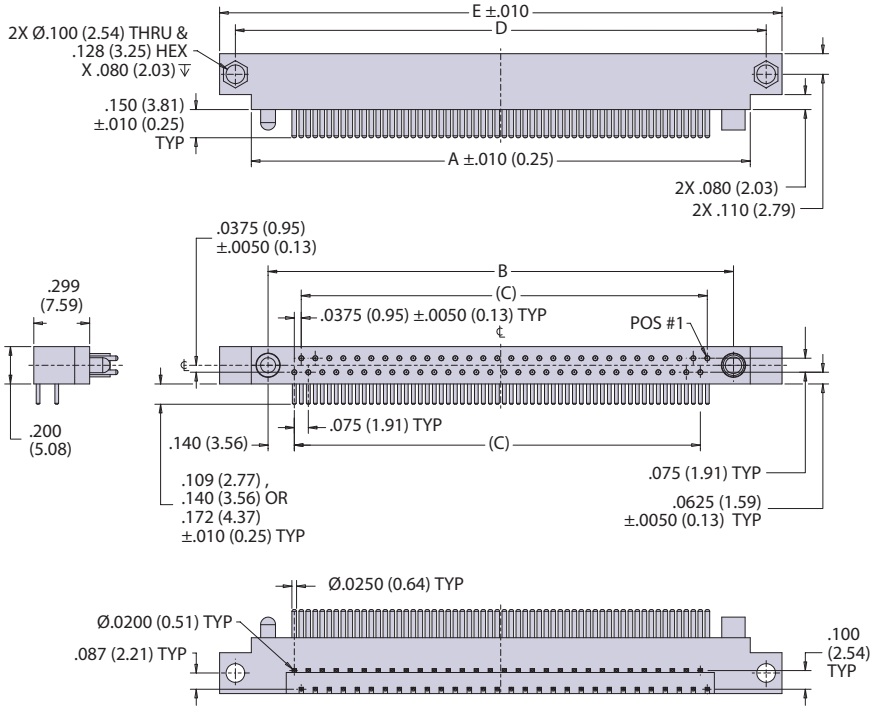


FIGURE 1. PLUG CONNECTOR, RIGHT ANGLE PIN CONTACTS - 2 ROW