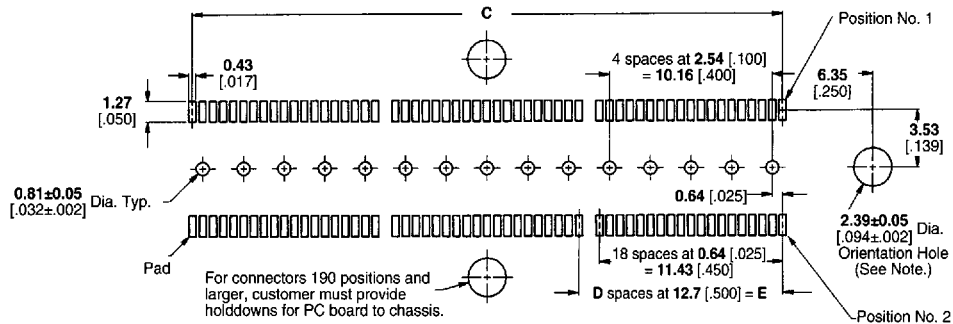
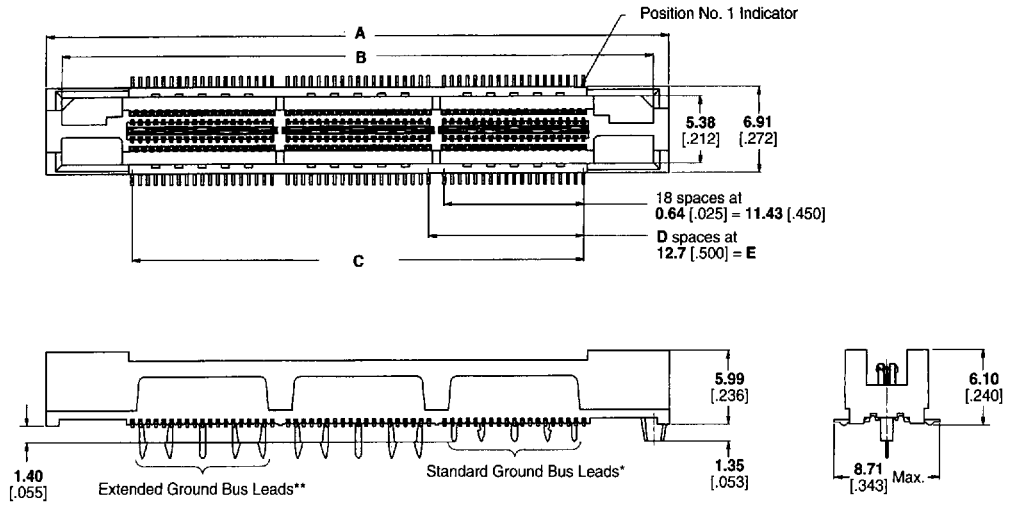


## MICTOR Vertical Receptacles

### Related Product Data:

- Material and Finish** — page 5
- Performance Characteristics** — page 5
- Mating Plugs** — pages 6 thru 13
- Technical Documents** — page 53



**Recommended PC Board Layout  
(Connector Side of Board Shown)**

No. of Positions	Dimensions					Part Numbers	
	A	B	C	D	E	Gold Plating	Palladium-Nickel Plating
38	25.40 1.000	22.86 .900	11.43 .450	0	—	2-767004-2	767054-1
76	38.10 1.500	35.56 1.400	24.13 .950	1	12.70 .500	2-767004-3	767054-2
114	50.80 2.000	48.26 1.900	36.83 1.450	2	25.40 1.000	2-767004-4	767054-3
152	63.50 2.500	60.96 2.400	49.53 1.950	3	38.10 1.500	2-767004-5	767054-4
190	76.20 3.000	73.66 2.900	62.23 2.450	4	50.80 2.000	2-767004-6	767054-5
228	88.90 3.500	86.36 3.400	74.93 2.950	5	63.50 2.500	2-767004-7	767054-6
266	101.60 4.000	99.06 3.900	87.63 3.450	6	76.20 3.000	2-767004-8	767054-7

\*One ground bus with 5 tails per each 38-position module.

\*\*Connectors with extended ground bus leads can be made available, consult AMP.

**Note:** For dual application, the orientation hole must be 1.98±0.03 [0.078±.001]. See Application Specification 114-11004 for details.

[www.DataSheet4U.com](http://www.DataSheet4U.com)

**Material and Performance Specifications, MICTOR Connectors****Material Specifications****Material****Housing:** Liquid crystal polymer, black**Contacts:** Beryllium copper**Ground Bus:** Phosphor bronze**Finish (Gold Plating)****Contacts and Ground Bus:** Duplex plated 0.00076 [.000030] min. gold in mating area, 0.00381 [.000150] min. tin-lead on leads, with entire contact and ground bus underplated 0.00178 [.000070] min. nickel**Finish (Palladium-Nickel Plating)****Contacts and Ground Bus:** Duplex plated 0.000013 [.000005] min. gold over 0.00076 [.000030] min. palladium-nickel in mating area, 0.00381 [.000150] min. tin-lead on leads, with entire contact and ground bus underplated 0.00178 [.000070] min. nickel**Performance Specifications****Ratings****Voltage:** 30 vac**Current:** Signal; 1.0 ampere, fully derated\*  
Ground; 7.6 amperes, fully derated\***Temperature:** -55°C to +125°C

\*Consult AMP for details on current rating.

**Electrical Characteristics****Characteristic Impedance:** 50±5 ohms at 1 ns**Termination Resistance:** ΔR 10 milliohms max.; AMP Specification 109-6-1**Insulation Resistance:** 10,000 megohms min.; AMP Specification 109-208-1**Dielectric Withstanding Voltage:** 500 vac at sea level; AMP Specification 109-29-1**Mechanical Characteristics****Solderability:** Solderable area shall have a 95% min. solder coverage; AMP Specification 109-11-1**Vibration (Random):** No discontinuities of 1 μs or longer duration; AMP Specification 109-21-5**Physical Shock:** No discontinuities of 1 μs or longer duration; AMP Specification 109-26-1**Durability (Tested to):** Mate and unmate samples at a rate of 600 cycles max. per hour. 25 cycles, gold plating; 500 cycles, palladium-nickel plating; AMP Specification 109-27**Contact Retention:** 1 lb min.; AMP Specification 109-30**Mating Force:** 152 oz max. per 1/2 inch of connector (1 module). Each module equals 38 signal contacts and 1 ground bus; AMP Specification 109-42**Unmating Force:** 19 oz min. per 1/2 inch of connector (1 module). Each module equals 38 signal contacts and 1 ground bus; AMP Specification 109-42**Environmental Characteristics****Thermal Shock:** Subject mated samples to 5 cycles between -55°C and +125°C; AMP Specification 109-22**Humidity - Temperature Cycling:** Subject mated samples to 10 cycles between +25°C and +65°C at 95% RH; AMP Specification 109-23-3, Condition B**Temperature Cycling:** Subject mated samples to 1024 cycles between -40°C and +60°C at 2 hours per cycle; AMP Specification 109-75-1**Temperature Life:** Subject mated samples to temperature life at +118°C for 792 hours; AMP Specification 109-43**Mixed Flowing Gas:** Subject mated samples to environmental class II for 14 days; AMP Specification 109-85-2

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**Technical Documents**

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Various technical documents are available for your use.

**Product Specifications** describe technical performance characteristics and verification tests. They are intended for Design, Component and Quality Engineers.

108-1422	MICTOR Connectors
108-1252	Micro-Strip Connectors (Cable-to-Board)
108-1272	Micro-Strip Connectors (Board-to-Board)
108-1244	Z-PACK Stripline 100 Connectors

**Application Specifications** describe requirements for using the product in its intended application and/or crimping information. They are intended for Packaging and Design Engineers and the Setup Person.

114-11004	Application Tooling for MICTOR Right-Angle Connectors
114-11005	Micro-Strip Connectors (Board-to-Board)
114-1065	Z-PACK Stripline 100 Connectors

**Instruction Sheets** provide instructions for assembling or applying the product. They are intended for the Manufacturing Assembler or Operator.

**MICTOR Connectors:**

408-4334	Slitting Tool 767527-1
408-4335	Right-Angle Connector Application Tool 767511-1

**Micro-Strip Connectors:**

408-6927	Design Recommendations for PC Board Support Fixture
408-7162	Impact Tools 380392
408-9708	Contact Replacement Tool Kit 311686-7
408-9895	AMP Seating Tools 90687

**Z-PACK Stripline 100 Connectors:**

408-4012	Pin Assembly Contact Replacement Tool Kit 768784-1
408-6927	Design Recommendations for PC Board Support Fixture
408-9675	AMP Seating Tools 854423 for Z-PACK Stripline 100 Pin Assemblies
408-9704	Pliers Kit 854904-1 for Insertion and Removal of Locking Clip on Z-PACK Modular Receptacle Assemblies

Other available technical publications include:

**Electrical Performance Reports:**

889061	MICTOR Right-Angle Connector
889062	MICTOR .430" High Stacking Connector
889116	MICTOR .260" High Stacking Connector
82833	Micro-Strip .430 High Vertical Stacking Connector
82353	Z-PACK Stripline 100 Connector (.100 Centerline, Four-Row, Right-Angle, Through-Hole Mount)

**Technical Papers:**

82509	High-Density, High Speed Board-to-Board Stripline Connector
82731	Design of a Micro-Strip Connector