

CoolPower® Slim Drawer

HIGH CURRENT CONNECTOR WITH COOLBAND CONTACT TECHNOLOGY

Amphenol ICC's CoolPower® Slim Drawer Series is configurable to accommodate various combinations of power and signal contacts and a number of mounting and termination options. CoolPower® Slim Drawer can deliver up to 60A per pin and provides an ultra-low end-of-life contact resistance of just 0.40mΩ. Additional features include blind-mating, sequential mating, and true hot-plug capabilities.

- Up to 60A per pin
- High current CoolBand power contacts for maximum performance
- Optional sequential contact engagement (first mate / last break)
- PCB orientation features and keying to prevent improper mounting and mating
- Metal guide pin / float mount system for additional mating reliability



TARGET MARKETS



FEATURES

- Low footprint height of only 10.80mm above board
- High current CoolBand contact technology
- Power contacts for power distribution and signal contacts for monitoring and control
- Highly configurable power and signal contacts
- Metal guide pin options

BENEFITS

- Optimizes board space usage and airflow
- Provides maximum performance and low resistance in a robust pin and socket
- Meets next-generation requirements
- Design flexibility
- Blind mateability

TECHNICAL INFORMATION

MATERIAL

Unless otherwise specified, the materials for each component shall be:

- Housing: High temp thermoplastic, glass reinforced UL 94V-0 black
- Hardware: Steel or brass, nickel plated
- Contacts: Phosphor bronze signal, gold over nickel plating, matte tin termination (socket & pin)
- Contacts: Copper alloy pins with silver or gold over nickel plating
- Contacts: Beryllium copper mating power grid, silver or gold over nickel plating (socket), copper alloy balance, silver over nickel or matte tin plating

MECHANICAL PERFORMANCE

- Durability: 10,000+ mating cycles
- CoolBand mating force per power contact:

CoolBand Size	8	10	12	14	16
Mating gauge pin (mm)	Ø3.50	Ø3.00	Ø2.40	Ø2.00	Ø1.50
Insertion force (kg)	2.00	1.20	1.10	0.90	0.50

- Minimum wipe length of power contact interface: 4.00mm
- Blind-mating guide blade alignment correction: 1.50mm
- Integrated features to prevent improper mating and incorrect assembly

ELECTRICAL PERFORMANCE

- Current Rating: Up to 60A per power contact (2.40mm solder tails) & 4A per signal contact
- Contact Resistance: LLCR: 20mΩ max. for signal contact
- Contact Resistance: LLCR: 0.25mΩ max. for power contacts
- Insulation Resistance: 5000MΩ
- Dielectric Withstanding Voltage: 2500V DC
- Working Voltage: 600V AC for power pins, 250V AC for signal contacts

ENVIRONMENTAL

- Operating Temperature: -55°C to +105°C
- Storage temperature: -55°C to +125° C

APPROVALS AND CERTIFICATIONS

- UL and CSA are in process
- RoHS Compliant
- UL1977

PACKAGING

- Carton
- Trays

TARGET MARKETS/APPLICATIONS



Power supply and distribution with signal line capabilities
Test equipment



Servers (1U,2U)
Storage devices



Test equipment

PART NUMBERS

Description	Part Numbers
SlimDrawer pin connector, solder cup termination family	DWR-TXXXP-VX1X-0X
SlimDrawer socket connector, solder cup termination family	DWR-TXXXS-VX1X-0X
SlimDrawer pin connector, vertical PCB solder tail termination (.150") family	DWR-TXXXP-VX3X-0X
SlimDrawer socket connector, vertical PCB solder tail termination (.150") family	DWR-TXXXS-VX3X-0X
SlimDrawer pin connector, vertical press fit termination family	DWR-TXXXP-VX6X-0X
SlimDrawer socket connector, vertical press fit termination family	DWR-TXXXS-VX6X-0X
SlimDrawer pin connector, right angle PCB solder tail termination (.150") family	DWR-TXXXP-RX3X-XX
SlimDrawer socket connector, right angle PCB solder tail termination (.150") family	DWR-TXXXS-RX3X-XX