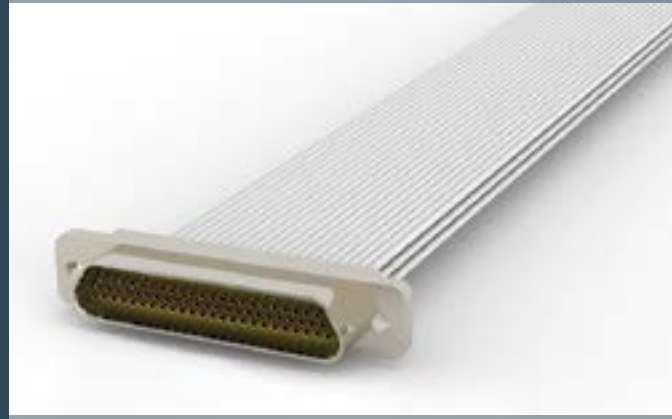


MICRODOT MICRO D CONNECTORS



TE Connectivity (TE) expands their current Micro D product line by adding 51 position (2 row), 69 position (3 row), and integrated backshells. The **51 position 2 Row MICRODOT** connector is a low-profile variant of the standard 3 row MilSpec part. The **69 position** is a midpoint variant of the standard MilSpec parts. These are both commercial PNs and used in various applications in which limited space and reduced weight are important considerations.

TE's MICRODOT integrated backshell is an innovative solution that helps solve EMI issues and provides a lower weight solution for braid termination than separate components. In markets as varied as Electric Vertical Take-Off and Landing (eVTOL), electronic warfare, and many missile and weapons platforms, TE's new MICRODOT Micro-D connectors demonstrate our proven and continuing commitment to ruggedness and reliability.

FEATURES AND BENEFITS

- Low profile is suitable in areas of limited available space
- Lightweight, small form factor connectors assist in overall weight reduction goals
- Integrated backshell comes complete and eliminates the need to purchase separately
- Meets MIL-DTL-83513

TARGET MARKETS

- Electric Vertical Take-Off and Landing (eVTOL)
- Electronic Warfare
- Military Space
- Missiles and Weapons
- Unmanned Aerial Vehicles (UAVs)
- Low Earth Orbit

APPLICATIONS

- eVTOL Flight Control and Avionics
- eVTOL Power Systems
- Launchers



ELECTRICAL

- **Current Rating:** 3 Amps max. per contact
- **Low Level Contact Resistance:** Less than 32 mOhms
- **Dielectric Withstanding Voltage:**
At Room Ambient: Volts RMS 60 Hz
At Sea Level: 600 V, 360 V after humidity
At 70,000 ft. [21,336 m]: 150V
- **Insulation Resistance:** 5,000 megohms min. (@ 500 VDC) at ambient room temperature
- **Contact Resistance:** 80 millivolts max. at 2.5 amps, 25° ± 3°C

MECHANICAL

- **Contact Engagement and Separation:**
Standard Contact Engaging Force: 6.0 oz. [1.67N] (8.0 oz. [2.22N] max.)
Separation Force: 0.5 [14N] oz. min.
- **Mating/Unmating Force:**
51 Position 2 Row: 510 oz. max
69 Position 3 Row: 690 oz. max
Integrated Backshell: 3 oz. max per contact
- **Vibration Resistance:** No discontinuity in excess of 1 μ second when tested as per EIA-364-28, test condition IV
- **Mechanical Shock Resistance:** No discontinuity in excess of 1 μ second when tested in accordance with EIA-364-27, test condition E
- **Contact Retention:** 5-pound minimum force
- **Insert Retention:** Inserts will withstand a 50 lb. [34N/cm²] per square inch load

MATERIALS

- **Shell:** 6061-T6 Aluminium per. TEC-100-363-1
- **Plating:** Electroless Nickel Plating
- **Insulator:** Glass Fiber Reinforced Polyphenylene Sulfide
- **Color:** Black, TE P/N 704025
- **Interfacial Seal:** Fluorosilicone Per SAE-AMS-R-25988, Type 2, Class 1, grade 40
- **Contacts:** BeCu UNS C17500
Finish: Gold plate per ASTM B488, Type 11, 50 microinches minimum; Or per MIL-G-45204, Type II, Class 1
- **Dust Cover**
51 Position 2 Row: Polypropylene
69 Position 3 Row: Polypropylene
Integrated Backshell: Low Density Polyethylene

Application Spec: Application spec-114 document
Qualification Test Report 69 Position: 501-160975.pdf
Qualification Test Report 51 Position: 501-160976.pdf

For more information on specific product offerings, technical information, availability and customization, please contact your TE Sales Representative.

51 POSITION 2 ROW



Part Number	Description
2415937-1	MCK-N1-B-51R2P6G1-18
2385096-1	MCK-N1-B-51R2P6G1-18
2415937-2	MCK-N1-LM-51R2P6G1-18
2385096-2	MCK-N1-P-51R2S6G1-18
2415937-3	MCK-N1-B-51R2P6Q1-18
2385096-3	MCK-N1-B-51R2S6Q1-18

Base plug and receptacle

69 POSITION 3 ROW



Part Number	Description
2415933-1	MCK-N1-B-69P6G1-18
2415934-1	MCK-N1-B-69S6G1-18
2415933-2	MCK-N1-LM-69P6G1-18
2415934-2	MCK-N1-P-69S6G1-18
2415933-3	MCK-N1-B-69P6Q1-18
2415934-3	MCK-N1-B-69S6G1-18

Base plug and receptacle

INTEGRATED BACKSHELL



Pos	Part Number	Drawing #	Description
9	2393076-1	2393076	BMCK-N1-B-9P6G1-K
	2393077-1	2393077	BMCK-N1-B-9S6G1-K
	9-2393076-1	2393076	BMCK-N1-B-9P6G1-K, TWISTED PAIR
	9-2393077-1	2393077	BMCK-N1-B-9S6G1-K, TWISTED PAIR
15	2385311-1	2385311	BMCK-N1-B-15P6G1-K
	2385312-1	2385312	BMCK-N1-B-15S6G1-K
	9-2385311-1	2385311	BMCK-N1-B-15P6G1-K, TWISTED PAIR
	9-2385312-1	2385312	BMCK-N1-B-15S6G1-K, TWISTED PAIR
21	2389088-1	2389088	BMCK-N1-B-21P6G1-K
	2389089-1	2389089	BMCK-N1-B-21S6G1-K
25	2388995-1	2388995	BMCK-N1-B-25P6G1-K
	2388996-1	2388996	BMCK-N1-B-25S6G1-K
31	2389198-1	2389198	BMCK-N1-B-31P6G1-K
	2393346-1	2393346	BMCK-N1-B-31S6G1-K
37	2388989-1	2388989	BMCK-N1-B-37P6G1-K
	2388892-1	2388892	BMCK-N1-B-37S6G1-K
51	2389118-1	2389118	BMCK-N1-B-51P6G1-K
	2389110-1	2389110	BMCK-N1-B-51S6G1-K
100	2392999-1	2392999	BMCK-N1-B-100P6G1-K
	2393000-1	2393000	BMCK-N1-B-100S6G1-K