



WITH TORTAC® TECHNOLOGY

Due to the increased market demand for miniaturisation, Hypertac has developed a new 160 way four contact row PCB connector based on the Tortac® technology. Tortac® is the evolution of Hypertac hyperboloid contact design dedicated to high density connectors.

Added to the usual specific characteristics of the HC contact, the unique Tortac® socket features a smaller pitch so that it can offer a contact density of 60 ways per cm2 compared with the standard density of 30 ways provided by the Hypertac contact.



This higher contact density provides a better performance in high frequency environments, giving a more homogeneous interconnection continuity profile. Developed to fulfill the specific custom requirements of Radar applications, the new 160 way connector utilizes Tortac® sockets with an external diameter of 0.8 mm to achieve 1.27 mm pitch, square grid, whilst maintaining the well known technical qualities of Hypertac contacts. The result is a high reliability connector that ensures extreme resistance to salt spray, shock and vibration, a very low stacking height, an ergonomic design (no sharp edges, very low insertion force) and a light weight. These characteristics make it ideal for harsh environment applications such as Marine, Aerospace & Defence, Rail Transportation, Industrial, Test & Measurement and Sport Cars.

The 160 way connector has successfully passed customer tests and is currently installed on FREMM frigates radar systems. Today Hypertac is delivering solutions with 1.27 mm pitch based on Tortac® sockets of 0.80 mm diameter, but Tortac® can also be used to achieve smaller pitches and Hypertac is now working on a 0.55mm socket diameter for 0.3mm diameter pins to improve the miniaturization process.

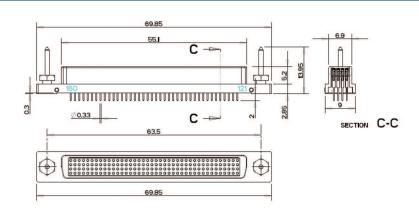
smiths

bringing technology to life

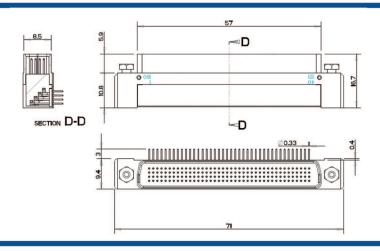


Technical Characteristics		
Contact number	160	
Receptacle contact temination	Dip solder	
Plug contact termination	Dip solder, right angle	
Current rating	3A single contact	
Insulator	PPS type GST-40F per MIL-M-245719 V0 per UL94	
Connector body	Avional 2024 per QQ-A-250-74E	









Tortac® contact



Dia	0.50 mm
Resistance	<5 mmΩ
Material	Beryllium Copper
Insertion force	<60g per contact
Shock & Vibration	no discontinuity >0.1µs