CAMBRIDGE ELECTRONIC INDUSTRIES

50Ω BNC Socket 12GHz Top Entry Bulkhead, 4.1mm Leg

Part Number ZBS-12-TB41-NN
Issue 1.0

General Description

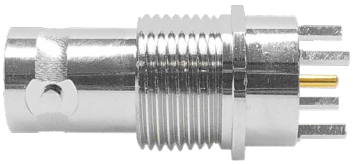
The ZBS-12-TB41-NN connector is a PCB top entry mounting BNC socket for PCB thicknesses of up to 4.0mm. This BNC connector offers a high frequency of up to 12GHz matched to the 50 ohm impedance connection offering a higher powered signal compared to the standard 75 ohm used for broadcast. The connector features a flat side to the bulkhead thread to reduce torque to the PCB on connectorisation.

Designed to complement our 75 ohm connector, this connector shares the same body design, ensuring a perfectly consistent appearance when both options are used within the same equipment.



Electrical

Impedance		50Ω
Frequency Range		0-12GHz
Working Voltage		500Vrms
Reflection Factor (VSWR)		1.17 (max) 0-6GHz 1.25 (max) 6-12GHz
Dielectric Withstanding Voltage		1500Vrms
Insulation Resistance		≥5000MΩ
Contact Resistance	Centre Contact	≤ 1.5mΩ
	Outer Contact	≤ 1.0mΩ

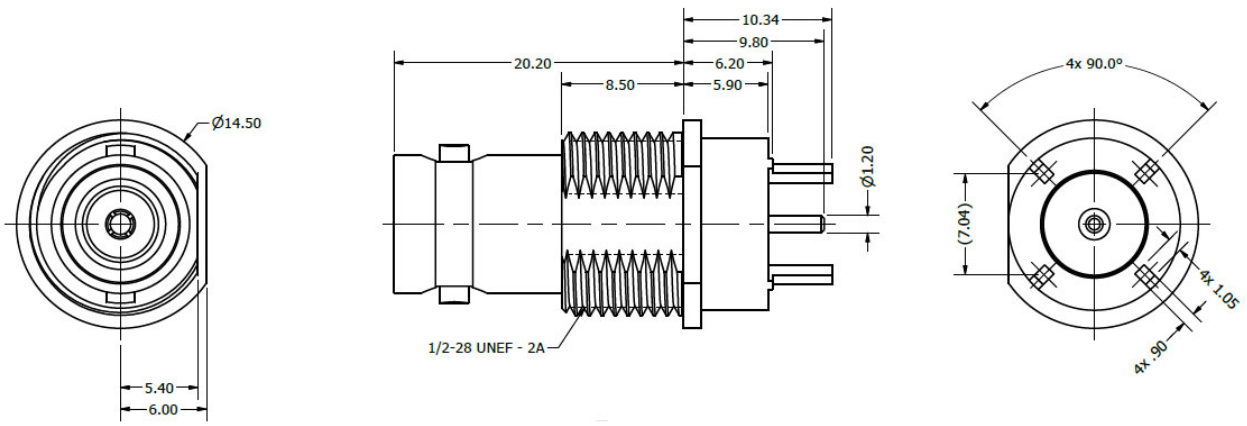


Materials

Centre Pin	PhosBronze / Au
Metal Parts	Brass/Ni
Insulators	PTFE

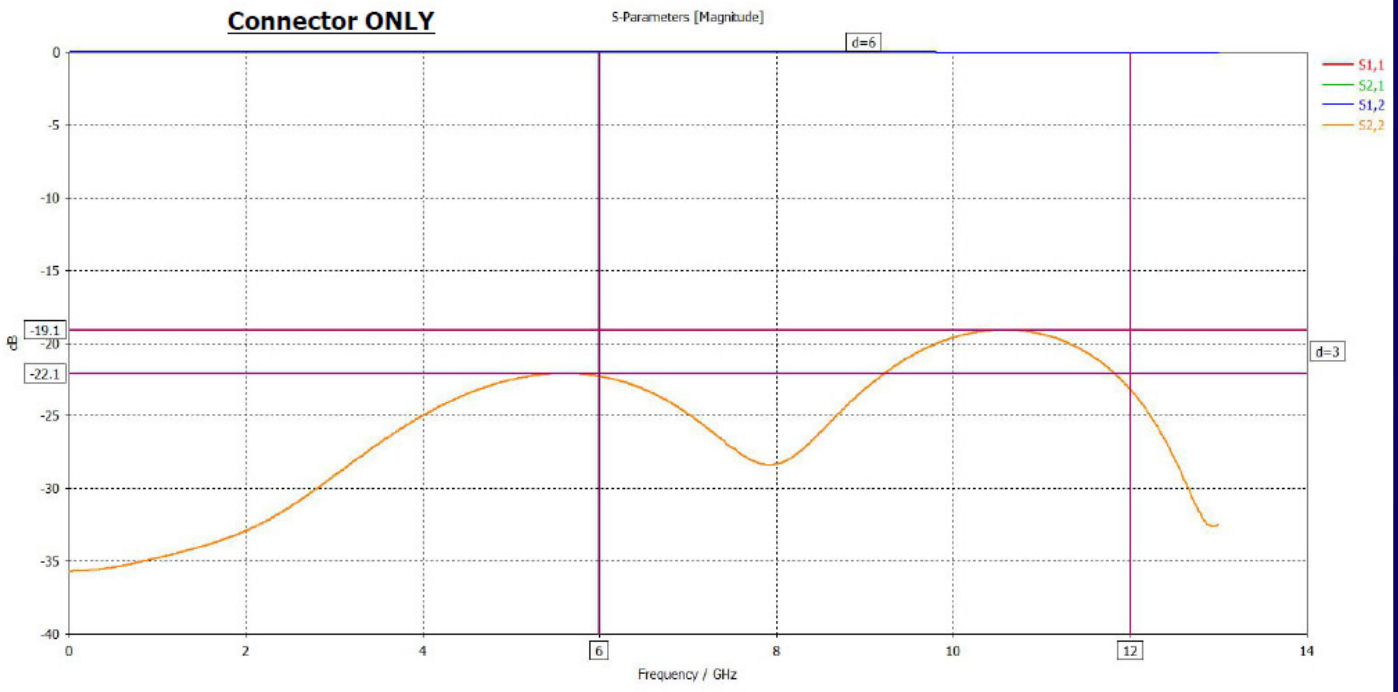
Environmental

Connector Type	BNC Female
Temp Range	-65 to +85°C
Mating Cycles	250



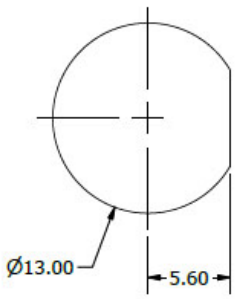
Tel: +44 (0)1223 860041
Tel: +44 (0)1223 863377
Website: www.cambridgeelectronics.com
Email: sales@cambridgeelectronics.com

Return Loss Graph

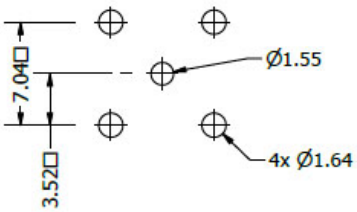


PCB Layout and Panel Cutout

Recommended Panel Cut Out

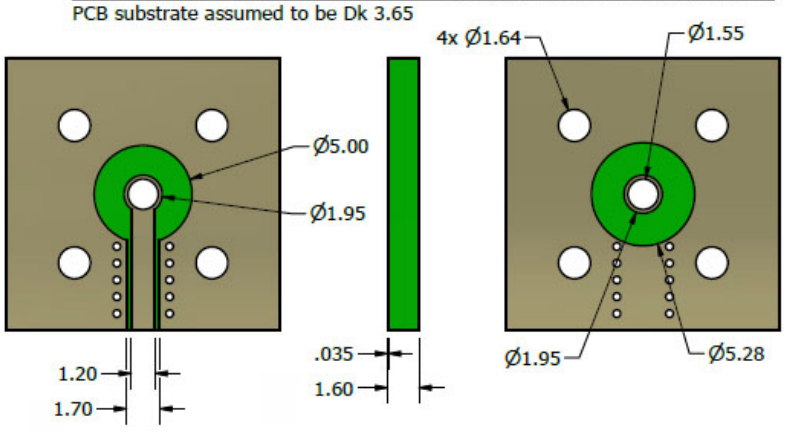


Recommended PCB Footprint



Suggested PCB layout intended as starting point for design iteration

PCB substrate assumed to be Dk 3.65



Tel: +44 (0)1223 860041
Tel: +44 (0)1223 863377
Website: www.cambridgeelectronics.com
Email: sales@cambridgeelectronics.com