



ELECTRICAL

Matching Impedance: 75 unbalanced coaxial to 120 balanced twisted pair
 Bit Rates: 2Mbit/s, 8Mbit/s and 34Mbit/s as ITU-T Recommendation G.703 Line Code
 Return Loss: 2Mbit/s, 8Mbit/s and 34Mbit/s as per G.703 requirements
 Insertion Loss: <0.9dB from 51kHz to 51.55MHz
 Cross Talk: >60dB from 51kHz to 51.55MHz between 2 baluns mounted 15mm apart
 Pulse Shape: 2Mbit/s, 8Mbit/s and 34Mbit/s as per G.703
 Signal Levels: 2.37V nominal peak voltage for 2Mbit/s and 8Mbit/s at the coaxial end
 1V nominal peak voltage for 34Mbit/s at the coaxial end as per G.703
 Isolation Voltage: 250VDC for 1 minute between windings
 Pulse Test: 3kV as per ITU-T, K.17
 EMC: CISPR 22 Class B for radiated emissions, also AS/NZS 3548 1995

MATERIALS

Coax Connector Outer Contact: Brass Alloy AS 1567 Type 385. Finish Cu/Ni/Au
 Outer Contact Snap Ring: Beryllium Copper
 Coax Connector Body: Brass Alloy AS 1567 Type 385. Finish Cu/Ni/Au
 Coax Connector Insulator: PTFE
 Coax Connector Inner Contact: Beryllium Copper. Finish Cu/Ni/Au
 Balun Body & Rear Tube: Brass Alloy AS 1567 Type 385. Finish Cu/Ni
 Grounding Ring: Brass Alloy AS 1567 Type 385. Finish Cu/Ni/Sn
 IDC Contacts: CuSn6. Finish Sn -(ϕ 0.25- ϕ 0.40 conductors)
 Sn/Au -(ϕ 0.50- ϕ 0.65 conductors)
 IDC Moulding & Stuffer Cap: Liquid Crystal Polymer, UL 94 V-0

COAXIAL CONNECTOR (75)

SMB Series: IEC 169-10
 Mating Cycles: 500

TWISTED PAIR CABLE DETAILS

Part Number	Cable Wire Size	Cable Entry Diameter
B04 078 070*	0.5mm (AWG 24) to 0.65mm (AWG 22) conductor diameter, STP or UTP Insulation diameter from 0.7mm to 1.5mm.	4.9mm Min. **
B04 078 075*	0.25mm (AWG 30) to 0.4mm (AWG 26) conductor diameter, STP or UTP Insulation diameter from 0.7mm to 1.5mm	2.6mm Min. **

* The correct selection of the balun to match the cable conductor size is imperative to the reliability of the product.
 ** Custom cable size available upon request.

IDC Mating Cycles: 20

ENVIRONMENTAL

Working Temperature: -30°C to 75°C
 RoHS Compliance: To EU Directive 2011/65/EU

TERMINATION

IDC Termination: Spanners, 8mm A/F 2 off

