

**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  
 Coax Connector Body: Brass Alloy AS 1567 Type 385. Finish Cu/Ni/Au  
 Coax Connector Insulator: PTFE  
 Coax Connector Inner Contact: Brass Alloy AS 1567 Type 385. Finish Cu/Ni/Au  
 Balun Body, Nut & 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  $-(\phi 0.25-\phi 0.40 \text{ conductors})$   
 Sn/Au  $-(\phi 0.50-\phi 0.65 \text{ conductors})$   
 IDC Moulding & Stuffer Cap: Liquid Crystal Polymer, UL 94 V-0

**COAXIAL CONNECTOR (75 )**

SMB Series: To IEC169-10  
 Mating Cycles: 500

**TWISTED PAIR CABLE DETAILS**

Part Number	Cable Wire Size	Cable Entry Diameter
B04 083 070*	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 083 075*	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. **

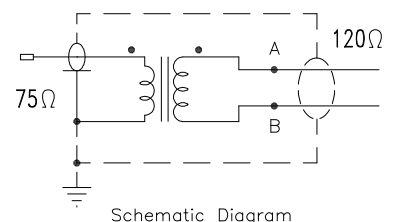
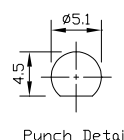
\* The correct selection of the balun to match the cable conductor size is imperative to the reliability of the product.

\*\* 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