PRODUCT DESCRIPTION

This Balun converts E1, E2 and E3 G.703 signals from unbalanced 75Ω coaxial to balanced 120Ω twisted pair transmissions. A bi-directional device requiring no external power, it allows the user to connect telecommunications equipment with mismatched interfaces or convert a coaxial DDF to twisted pair. Designed for mounting in a DDF panel this product offers the following features:

- coax to twisted pair conversion
- exceeds G.703 requirements
- > 30dB return loss 0.3 to 10MHz
- shielded construction
- genuine Krone® IDC
- BNC (m) connector to IEC 169-8
- 75Ω to 120Ω impedances
- < 0.35dB E1 insertion loss
- > 1.25µm of gold plating on pin
- designed for long life
- small size
- 2, 8 and 34Mbit/s data rates
- > 60dB cross talk
- teflon coaxial insulators
- built for high reliability

OPERATING CONDITIONS

Matching Impedance: 75 ohm unbalanced coaxial to 120 ohm balanced twisted pair
Bit Rate: 2Mbit/s (E1), 8Mbit/s (E2) and 34Mbit/s (E3) per ITU-T G.703 Line Code
Signal Level: 2.37V p-p (2&8Mbit/s), 1V p-p (34Mbit/s) at the coaxial end per G.703
Working Temperature: -30°C to 75°C

ELECTRICAL SPECIFICATIONS

Insertion Loss: < 0.35dB from 51kHz to 51.55MHz and in both directions
< 0.15dB for 2&8Mbit/s fundamental, < 0.2dB for 34Mbit/s fundamental as per G.703
Return Loss: Exceeds G.703 requirements in both directions
> 21dB from 51kHz to 102kHz
> 26dB from 102kHz to 17.184MHz
> 21dB from 17.184MHz to 34.368MHz and
> 19dB from 34.368MHz to 51.555MHz
Pulse Shape: Exceeds G.703 requirements for 2Mbit/s, 8Mbit/s and 34Mbit/s
Cross Talk: > 60dB from 51kHz to 51.55MHz, 2 baluns 20mm apart
Isolation Voltage: < 250V DC

MECHANICAL SPECIFICATIONS

Coaxial Connector: BNC male to IEC 169-8
Body: Brass, Plated Cu/Ni5b and Cu/Ni2/Sn5
Pin: Brass, Plated Cu/Ni5/Au1.25
Insulator: Teflon
Mating Cycles: 500min
IDC Connector: Wire: Conductor Ø 0.4 to 0.65mm, Insulation Ø 0.7 to 1.4mm
Contacts: Silver Plated
Moulding: Polyester White
Mating Cycles: 50min
Mouldings: Noryl Black

TERMINATION

IDC: Krone Connection Tool 6089 2 003-00 or 6417 1 810-02