ACE AND E
TELECOMMUNICATIONS

483

25

16.5

Adjustable Mounting Brackets

1 2 3 4 5 6 7 8   9 10 11 12 13 14 15 16   Tx

Rx

SMB(M) Insulated Connectors x32   MDR68 Shielded Socket   Printed Labels Or Optional Designation Strips

44

57.93

46.91

1.27

Contact 35

4-40 Threads

Contact 1

Contact 68

6.3

MDR68 Female Connector Detail

34

23

View With Bracket Removed

PRODUCT DESCRIPTION

This Balun Panel converts E1 and E2 G.703 signals from unbalanced 75   coaxial to balanced 120   twisted pair transmissions. A bi-directional device requiring no external power, it allows the user to connect telecommunications equipment with mismatched interfaces. This product offers the following features:-

- coax to twisted pair conversion
- 75   to 120   impedances
- mounts in standard 19" rack
- zinc sealed, powder coated steel
- exceeds G.703 requirements

- SMB(m) to MDR68(f) (Mini Centronics)
- >33dB return loss 0.3 to 3MHz
- mount recessed to ease cable entry
- gold plated contacts
- ETSI and 23" brackets available

- RoHS compliant
- <0.15dB E1 insertion loss
- single sided cable access
- teflon coaxial insulators
- optional designation strips

OPERATING CONDITIONS

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

ELECTRICAL SPECIFICATIONS

Insertion Loss:	<0.15dB from 51kHz to 3.072MHz (2Mbit/s, E1) and <0.20dB from 211kHz to 12.672MHz (8Mbit/s, E2) in both directions
Return Loss:	Exceeds G.703 by >13dB for 2Mbit/s and >8dB for 8Mbit/s
Pulse Shape:	Exceeds G.703 requirements for 2Mbit/s and 8Mbit/s
Cross Talk:	>65dB from 51kHz to 12.672MHz between channels (>50dB for adjacent MDR68 connector contacts)
Isolation Voltage:	>250V DC

MECHANICAL SPECIFICATIONS

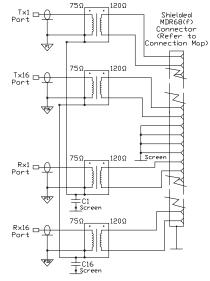|	
Coaxial Connector:	SMB male to IEC 169-29 Body: Brass, Plated Cu/Ni/Au Pin: Brass, Plated Cu/Ni/Au Insulator: Teflon Mating Cycles: 500min
MDR68 Connector (SCSI):	Contacts: Phosphor Bronze, Plated Ni/Au Moulding: Thermoplastic, Black Shell: Steel, Plated Ni Housing: Die Cast, Plated Ni
Panel:	Steel, Zinc Sealed and Powder Coated Black
Panel Insulators:	Thermoplastic, Black

ACCESSORIES

Cable Assemblies:	MDR68(m) to MDR68(m) on shielded 34 pair cable
Mounting Brackets:	For ETSI 21" and 23" racks
Cable Management Kits:	For 19", 21" and 23" racks

Tx1 Port   75Ω   120Ω   Shielded MDR68(f) Connector (Refer to Connection Map)

Tx16 Port   75Ω   120Ω

Rx1 Port   75Ω   120Ω   Screen

C1 Screen

Rx16 Port   75Ω   120Ω

C16 Screen

Balun Circuit For MDR68

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