



DATA SHEET	2170073
ETHERNET Coaxial cable Typ 10BASE5	valid from : 08.07.2002

Application

ETHERNET coaxial cable type 10base5, according to ETHERNET specification IEEE-standard 802.3 is the base type for cabling of the local network on the basic frequency band, with bus network structure and CSMA/CD treatment of access. Data transmission rate is 10 Mbit/s, the maximal cable length is by 10BASE5 = 500 m. All devices are connected with the transceiver by a transceiver cable (AUI cable).

Design

Conductor	solid, bare copper wire, tinned 2,17 mm \varnothing
Insulation	cellular PE 6,2 mm diameter
Screen	1. alu-foil 2. braid of tinned copper 3. alu- foil 4. braid of tinned copper
Sheath	PVC, yellow
Outer diameter	10,3 mm

Technical data

DC resistance inner conductor		Ω/km	< 5
DC resistance outer conductor		Ω/km	< 5
Characteristic impedance at		Ω	50 ± 2
Velocity of propagation		%	≥ 77
Transfer impedance at	1 MHz	$\text{m}\Omega/\text{m}$	0.9
	10 MHz	$\text{m}\Omega/\text{m}$	0.3
	100 MHz	$\text{m}\Omega/\text{m}$	6.0
Attenuation	1 MHz	$\text{dB}/100 \text{ m}$	0,5
	5 MHz	$\text{dB}/100 \text{ m}$	1,2
	10 MHz	$\text{dB}/100 \text{ m}$	1,8
	30 MHz	$\text{dB}/100 \text{ m}$	2,9
	50 MHz	$\text{dB}/100 \text{ m}$	3,7
	100 MHz	$\text{dB}/100 \text{ m}$	5,1
	300 MHz	$\text{dB}/100 \text{ m}$	9,8

Mechanical and thermal characteristics

Minimum bending radius for once-through bending	mm	150
Permissible pulling strength at 10°C	max. N	250
Permissible temperature range	°C	-55 bis + 80

elaborated by: TE-K: N. Ensslen / M. Herb	Document: DB2170073_2EN	page 1 of 1
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