

## OVERVIEW

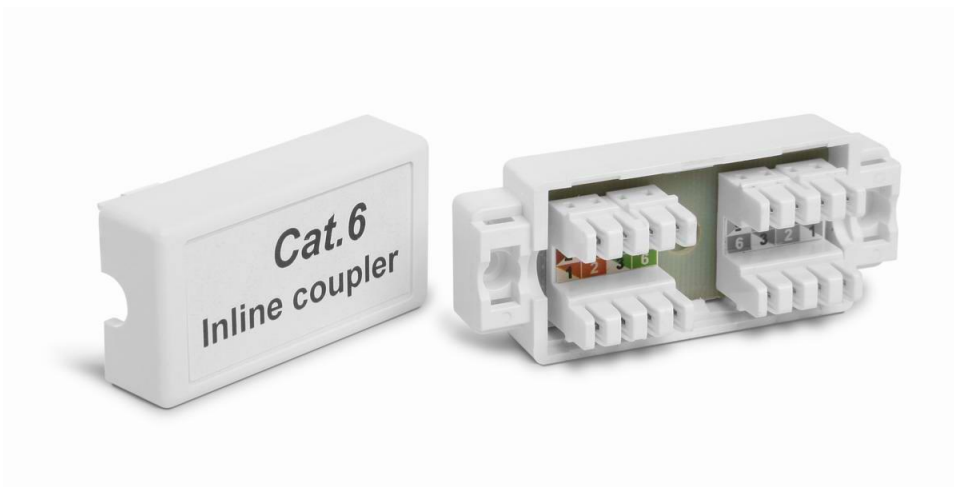
Zemecs T521BX series inline couplers are used to connect Category 6 unshielded LAN cables. The products which fully comply with ISO/IEC 11801:2011(Ed.2.2) Class E and ANSI/TIA/568-2.D Category 6 requirements for Gigabit structured cabling systems are verified by Intertek (ETL) and guarantee relevant total channel performance.

## FEATURES

- Exceeds requirements of ANSI/TIA/EIA-568.2-D, EN 50173, ISO/IEC 11801 Class E cabling standards for channels, links and components
- Terminated with 110 type tools
- Error free performance up to 250 Mhz. at 1 Gigabit Ethernet
- Accommodates 22 - 24 AWG solid cables
- Certificated by Intertek(ETL)

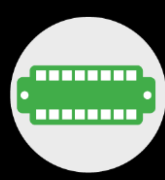
## APPLICATIONS

- 1000 Base-T Gigabit Ethernet
- 100 Base-TX Fast Ethernet
- 10 Base-T Ethernet
- 622 Mbps ATM
- 155 Mbps ATM
- ISDN
- 4/16 Mbps Token Ring
- 100 Mbps TP-PMD
- Broadband and baseband video



## MATERIAL AND PHYSICAL SPECIFICATIONS

Housing Material	ABS, UL94V-0
IDC Material	PC, UL94V-0
IDC Terminal	200µ" Tinned Phosphorous Bronze Over 100µ" Nickel Undercoat
PCB	FR4, 1,6mm. Thickness
Contact Holder	PC, UL94V-0.
IDC Contact Angle	180°
Colour	White



## COMPLIANCE

Standards For Generic Cabling And Cabling Components - Category 6 Requirements
• ISO/IEC 11801-1:2017 (V.1.0)
• ISO/IEC 11801-2:2017 (V.1.0)
• EN 50173-1:2011, EN 50173-2:2007 (Including A1:2010 amendmend)
• IEC 60603-7-4: 2010 (V.2.0)
• IEC 60512-99-001:2012 (V.1.0)
• ANSI/TIA-568.2-D
Standards For The Restriction Of Use Of Hazardous Substances In Electrical And Electronic Equipments
• 2011/65/EU (RoHS-2)
Certification
• Certificated by Intertek(ETL).

## TRANSMISSION PERFORMANCE

FREQUENCY (Mhz.)	INSERTION LOSS (dB., max.)	RETURN LOSS (dB., min.)	NEXT (dB., min.)	FEXT (dB., min.)	TCTL (dB., min.)
1	0,05	40,00	78,00	80,00	45,00
4	0,03	40,00	78,00	75,00	45,00
8	0,04	40,00	78,00	67,00	45,00
10	0,03	40,00	76,00	65,00	45,00
16	0,04	40,00	72,00	62,00	45,00
20	0,04	40,00	69,30	59,00	45,00
25	0,04	40,00	67,40	56,90	45,00
31,25	0,04	40,00	65,20	56,00	43,00
62,5	0,05	37,00	59,00	50,00	37,00
100	0,07	32,00	56,00	46,00	33,50
200	0,13	26,00	52,00	40,00	27,50
250	0,15	24,00	46,80	38,00	26,00

Typical performance for TIA Channel is given. Actual performance may vary depending on installation and environmental conditions.

## ENVIRONMENTAL SPECIFICATIONS

Transportation & Storage Temperature	-40 / +70	°C
Installation Temperature	-20 / +60	°C
Operation Temperature	-10 / +60	°C
Relative Humidity	10 - 93, Non-condensing	%

## MECHANICAL SPECIFICATIONS

Durability(Termination Cycles)	200	Cycles, Max.
Contact Compatibility	22-24 AWG	Solid or stranded
Suitable Termination Tool	110	

## ELECTRICAL SPECIFICATIONS

Insulation Resistance (@500 VDC)	500	MΩ, Min.
DC Resistance (@20 °C)	0,1	Ω, Max.
Contact Resistance	20	mΩ, Max.
Termination Resistance	2,5	mΩ, Max.
Current Rating	1,5	A, Max.
Dielectric Strength (@60 Hz. / 1min.)	1.000	VAC Rms
Propagation Delay Skew	1,25	ns., Max.
Coupling Attenuation	60	dB., Max.

## PART NUMBER CODING

Part Nr.	Product Description
T521BA or T521B1	Zemecs Category 6 UTP Inline Coupler, 110 Type

