



OVERVIEW

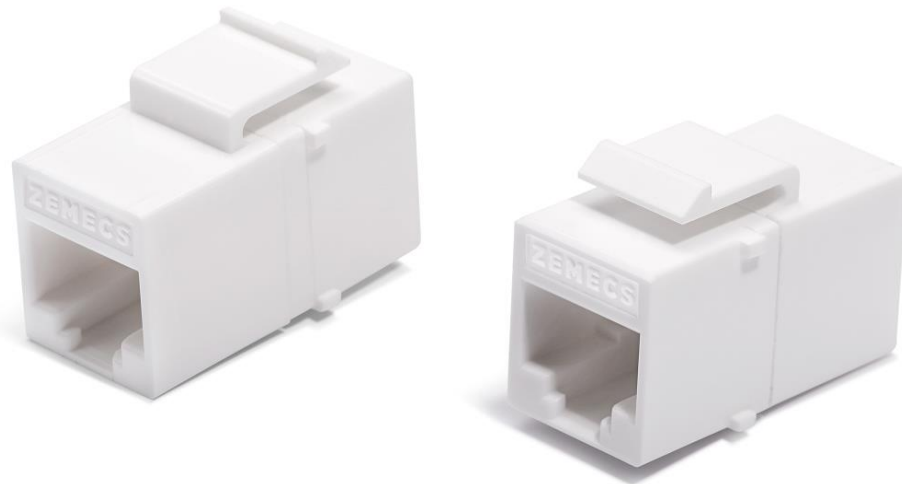
Zemecs T4251Y keystone couplers are used to connect two RJ-45 terminated LAN cables. Like all other Zemecs keystone jacks, they exceed ISO / IEC 11801:2011 (Ed.2.2) Class E and ANSI / TIA / 568.2-D Category 6 requirements for Gigabit structured cabling systems. The products fit* into Zemecs unloaded patch panels and faceplates and may also be used as conjunction for LAN cables.

FEATURES

- Exceeds requirements of ANSI/TIA/EIA-568.2-D, EN 50173, ISO/IEC 11801, IEC 60603-7 and IEC 60512-99 cabling standards for channels, links and components
- Error free performance up to 250 Mhz. at 1 Gigabit Ethernet
- 50µ" gold plated contact surface
- TIA 568 A/B Wiring
- White (other colours subject to MoQ)

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
Plug Contact Surface	50µ" Gold Plate Over 100µ" Nickel
IDC Terminal	100µ" Tinned Phosphorous Bronze Over Nickel Undercoat
PCB	FR4, 1,6mm. Thickness
Colour	White(standard), others optional
Dust Protection Cover	N/A



COMPLIANCE

Standards For Generic Cabling And Cabling Components - Category 6 Plug Requirements
• ISO/IEC 11801-1:2017 (V.1.0)
• ISO/IEC 11801-2:2017 (V.1.0)
• EN 50173-1:2018, EN 50173-2:2018
• IEC 60603-7-4: 2010 (V.2.0)
• ANSI/TIA-568.2-D:2018
Standards For The Restriction Of Use Of Hazardous Substances In Electrical And Electronic Equipments
• 2011/65/EU (RoHS-2)

TRANSMISSION PERFORMANCE

FREQUENCY (Mhz.)	INSERTION LOSS (dB., max.)	RETURN LOSS (dB., min.)	NEXT (dB., min.)	FEXT (dB., min.)	TCTL (dB., min.)
1	0,08	35,00	76,00	78,00	43,00
4	0,06	35,00	76,00	73,00	43,00
8	0,07	35,00	76,00	66,00	43,00
10	0,06	35,00	76,00	64,00	43,00
16	0,07	35,00	71,00	60,70	43,00
20	0,07	35,00	69,00	58,00	43,00
25	0,07	35,00	67,00	56,00	43,00
31,25	0,07	35,00	65,00	55,00	41,00
62,5	0,08	32,00	58,50	49,00	35,00
100	0,12	28,00	55,00	45,00	31,50
200	0,22	22,00	50,00	39,00	24,50
250	0,22	20,00	46,40	36,00	24,00

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

Compatible Plug Type	8P8C	RJ-45 (x2)
Insertion Life	750	Cycles (IEC-60603-7)
Plug-Jack Contact Force	100	g., Max. (FCC Compatible RJ-45 Plug)
Plug-Jack Coupling Force	8	N., Max. (all wires)

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	2	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
T4251Y	Zemecs Category 6 UTP Keystone Coupler (Y denotes colour)
Y	A or W: White, C or K: Black, Y: Yellow G: Green L: Blue O: Orange R: Red V: Violet