



Category 6A Shielded Tool-Less RJ-45 Keystone Jacks



Description

HCS DataLink 500A Tool-Less shielded copper RJ-45 keystone jack series includes high performance fully shielded Category 6A snap-in 8-position/8-contact (8P8C) jacks conforming to IEC 60603-7-51 (shielded 500 MHz connectors).

HCS DataLink 500A tool-less jacks are designed for simple and reliable termination, fast and easy snap-in and out of wall plates, patch panels and surface box outlets.

HCS DataLink 500A tool-less jacks are designed in a 180° orientation and are available with back interconnection of 110 IDC blocks in universal pin/pair assignment. All jacks fully conform to and provide a substantial margin above all ANSI/TIA-568-C.2 and IEC 60603-7-51 component requirements, tested at the component level.

The HCS Logo and the DataLink 500A Trademark ensure long lasting high-performance and full support of all present and emerging applications, including 10GBASE-T (10 Gigabit-Ethernet).

Applications

HCS DataLink 500A shielded tool-less copper RJ-45 keystone jacks are used in wall outlets, patch panels and surface box outlets and they fully support all presently available LAN applications, including the following protocols:

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|---|---|---|
| <input checked="" type="checkbox"/> 10GBASE-T 10 Gigabit Ethernet | <input checked="" type="checkbox"/> 100BASE-T4 | <input checked="" type="checkbox"/> Token Ring 4 Mbps and 16 Mbps |
| <input checked="" type="checkbox"/> 1000BASE-T Gigabit Ethernet | <input checked="" type="checkbox"/> 100BASE-TX | <input checked="" type="checkbox"/> Broadband and Baseband Video |
| <input checked="" type="checkbox"/> ATM 155 | <input checked="" type="checkbox"/> Token Ring 100 Mbps | <input checked="" type="checkbox"/> ISDN Basic and Primary Access |
| <input checked="" type="checkbox"/> TP-PMD | <input checked="" type="checkbox"/> ATM 52 | <input checked="" type="checkbox"/> 1BASE-5 Starlan |
| <input checked="" type="checkbox"/> 100BASE-T Fast Ethernet | <input checked="" type="checkbox"/> ATM 25 | <input checked="" type="checkbox"/> ISALAN |
| <input checked="" type="checkbox"/> 100BASE-T2 | <input checked="" type="checkbox"/> 10BASE-T Ethernet | <input checked="" type="checkbox"/> ITU V.21 and X.11 |

Qualifications and Approvals

HCS DataLink 500A tool-less jacks are supported by the Century™ Lifetime Warranty and by the DoubleSafe™ QA program as a part of complete HCS cabling system. HCS DataLink 500A jacks are tested and verified at the component level. They comply to IEC 60603-7-51 (8-way, shielded, fixed and fixed connectors, for data transmission with frequencies up to 500 MHz) and to the following standards:

TRANSMISSION

- ANSI/TIA/568-C.2 CAT 6A
- ISO/IEC-11801 CAT 6A

EMC

- EN-55022, Class B (Europa)
- FCC Part 15, Subpart J, Class A (USA)

SAFETY

- UL94 V-0 rated plastic materials
- Zero-halogen in LSOH constructions.

Benefits & Features

- Exceptional material properties and design - Providing a unique Century™ Lifetime Warranty.
- Patented 180° design - Providing perfect termination with minimum distance to the IDC.
- High quality corrosion-resistant thick die-cast shield - Providing excellent EMC (Electro Magnetic Compatibility), minimizing radiation and maximizing noise immunity.
- Detailed installation manual in English and Turkish - Providing clear and comprehensive instructions.
- Exceeding Category 6A performance - Providing full support to 10 Gigabit Ethernet.
- Robust and installer-friendly design - Providing reduced installation and operating costs
- Compatible with 22-26 AWG solid or stranded conductors - Providing support to a wider range of cabling types.
- Unique DoubleSafe™ Quality Assurance Program - Providing lowest rejection rate available.

GENERAL PROPERTIES

Housing Material	High impact, Flame-retardant plastic compound, UL 94 V-0.
Overall Shield	Fully shielded corrosion-resistant die-cast zinc-alloy casing.
Jack Contacts Spring Material	High strength phosphor bronze alloy.
Jack Contacts Plating	1.27 µm gold plating over 5µm nickel.
IDC Contacts Material	High strength phosphor bronze alloy.
IDC Contacts Plating	Pure SN alloy, 5µm min. thickness.
Operating Environmental Conditions	-10 to +60C at 5-93% RH (Non condensing)
Storage Environmental Conditions	-40 to +70C at 5-93% RH (Non condensing)
Packaging	50 or 100 units per box.
Plug to Jack Retention Force	50N min for 60 sec..
Plug to Jack Mating Force	9N max. for 8 wire jack.
Terminated Wire Retention Force	Axial pullout force: 9N min. Normal pullout force: 44N min
Insertion/Extraction Durability	750 mating cycles conforming to IEC 60603-7 Level A durability
IDC Termination Durability	200 terminations min. acc to TIA/EIA 568B.2 requirements.
Conductor Compatibility Range	22 to 26 AWG, solid or stranded
Standard Color	White RAL 1013.

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TRANSMISSION AND ELECTRICAL SPECIFICATIONS

FREQ.	Insertion Loss	NEXT	FEXT	RL	TCL	EL TCTL	PS ANEXT	PS AFEXT
MHz	dB	dB	dB	dB	dB	dB	dB	dB
	Max	Min	Min	Min	Min	Min	Min	Min
1.00	0.1	75.0	75.0	30.0	40.0	40.0	67.0	67.0
4.00	0.1	75.0	71.1	30.0	40.0	40.0	67.0	67.0
8.00	0.1	75.0	65.0	30.0	40.0	40.0	67.0	67.0
10.00	0.1	74.0	63.1	30.0	40.0	40.0	67.0	67.0
16.00	0.1	69.9	59.0	30.0	40.0	40.0	67.0	67.0
25.00	0.1	66.0	55.1	30.0	40.0	40.0	67.0	67.0
31.25	0.1	64.1	53.2	30.0	38.1	38.1	67.0	67.0
62.50	0.16	58.1	47.2	30.0	32.1	32.1	67.0	67.0
100.00	0.20	54.0	43.1	28.0	28.0	28.0	67.0	67.0
200.00	0.28	48.0	37.1	22.0	22.0	22.0	64.5	61.0
250.00	0.32	46.0	35.1	20.0	20.0	20.0	62.5	59.0
300.00	0.35	42.9	33.6	18.5	18.5	18.5	61.0	57.5
400.00	0.40	37.9	31.1	16.0	16.0	16.0	58.5	55.0
500.00	0.45	34.0	29.1	14.0	14.0	14.0	56.5	53.0

Propagation Delay	2.5 nS max @ 1-250 MHz
Propagation Delay Skew	1.25 nS max @ 1-250 MHz
Current Rating	1.5 A max.
Contact Resistance	20 mOhm max (per contact)
Input/Output Resistance	200 mOhm max
Input/Output Resistance Unbalance	50 mOhm max
Voltage Rating	72 Vdc max
Dielectric Strength	1000 Volts rms for 1 minute
Insulation Resistance	500 MegaOhm min @ 500 Vdc
DC Resistance	0.1 Ohm max @ 20C
Coupling Attenuation	35-20Log(f/100) dB@ 100-1000 MHz

ORDERING INFORMATION

HCS P/N	Description	Blocks	T568
J6A-00824	8P8C RJ-45 Shielded Category 6A Tool-less 180° Keystone Jack	110 IDC	B
J6A-00825	8P8C RJ-45 Shielded Category 6A Tool-less 180° Keystone Jack	110 IDC	A
J6A-00826	8P8C RJ-45 Shielded Category 6A Tool-less 180° Keystone Jack	110 IDC	UNI