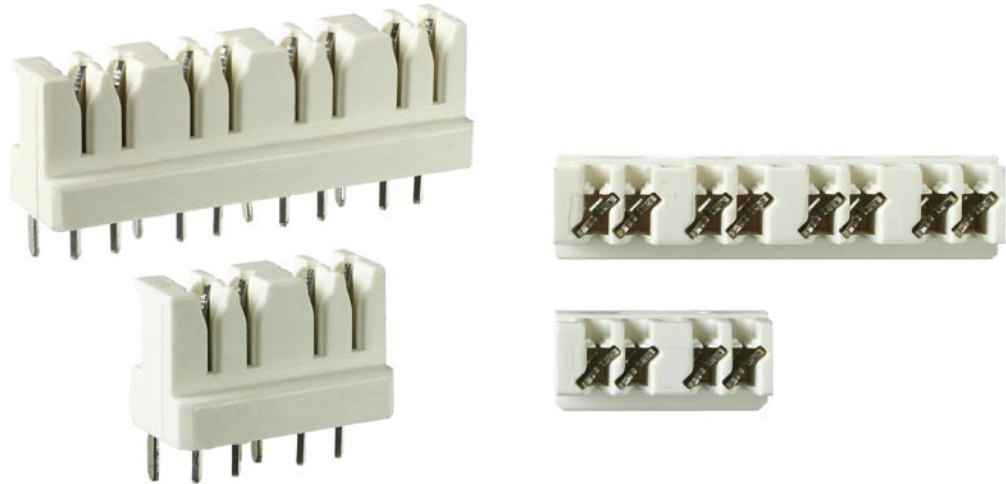


PCB-PLUS

300 MHz/Category 6 and 100 MHz/Category 5e PCB Modules



Application

PCB-Modules are circuit board connectors in which copper conductors are terminated using the LSA-PLUS® Quick Connection System.

Features

- The modules are suitable for installation in Category 6 and Category 5e components.
- Printable with colour code and/or lettering.
- Simple installation of all components using ADC KRONE PCB Module technology.
- The ADC KRONE LSA-PLUS® contact system ensures high reliability.
- Optimum solder preparation via closed module base.

TECHNICAL DATA

	Conductor diameter	Diameter of insulation	Retermination	Double connection
Solid wire Category 5e and Category 6	AWG 27 (0.36 mm)	0.7 – 0.75 mm	Up to 50x	No
	AWG 26 - AWG 22 (0.4 - 0.64 mm)	0.7 - 1.4 mm		Up to 10x
Category 6 only	AWG 24 - 20 (0.51 - 0.81 mm)	1.0 - 1.4 mm		No
Stranded wire Category 5e and 6	AWG 24 (7 x 0.2 mm)	1.1 - 1.4 mm		No
Other conductor diameters on request and after testing. Double termination (two wires on the same LSA-PLUS contact) only with the identical wire dimensions				



Technical Assistance:
Europe & Middle East
+32 2 712 6542
euro.tac@adckrone.com
www.adckrone.com

South Africa
+27 11 466 3333
infos@adckrone.com

United Kingdom
0800 960236
contactuk@adckrone.com

General technical values

Environmental: Operation temperature range: -40°C to +65°C

Mechanical Values

Compatible sheathing: PE or PVC plastic insulated copper conductors

Material of the conductor: Copper wire tinned or blank
Copper stranded wire tinned

Circuit board thickness: 1.6 mm max.

	Conductor diameter	Diameter of insulation	Retermination	Double connection
Solid wire Category 5e and Category 6	AWG 27 (0.36 mm)	0.7 – 0.75 mm	Up to 50x	No
	AWG 26 - AWG 22 (0.4 - 0.64 mm)	0.7 - 1.4 mm		Up to 10x
Category 6 only	AWG 24 - 20 (0.51 - 0.81 mm)	1.0 - 1.4 mm		No
Stranded wire Category 5e and 6	AWG 24 (7 x 0.2 mm)	1.1 - 1.4 mm		No
Other conductor diameters on request and after testing. Double termination (two wires on the same LSA-PLUS contact) only with the identical wire dimensions				

Material

Plastics: Polybutylenterephthalat (PBT)

Flammability: In accordance with UL94 V-0 (self extinguishing)

Contact material: Category 6: Tinned
Category 5e: Brass, tinned or silvered

Comparative Tracking Index (CTI): 600

All materials used are RoHS compliant.

Electrical values

Insulation resistance: > 5x10⁴ mΩ

AC voltage strength: 2 kV_{eff}

Surge strength: 3.6 kV
(with waveform 1.2/ 50 μs)

Contact resistance: ≤ 2.5 mΩ

Operating Voltage: 120V, Applications for SELV – or TNV – areas

Recommendations for the soldering process

Solder lead-free: Solder SnAg3.5
 Double-wave-soldering machine manufactured by ERSA of the type N-Wave 330
 Residual oxygen concentration of 35 – 60 ppm

Machine setting:
 Transport speed: 90 cm/min
 Spray flux dosage: Level 7 (1.....14)
 Preheating: 190°C
 (forced convection1)
 Preheating: 205°C
 (forced convection2)
 Preheating (Emitterpower1): 30 %
 Preheating (Emitterpower 2): 30 %
 Preheating (Emitterpower 3): 35 %
 Preheating (Emitterpower 4): 40 %
 Chip-Solder-wave flow: 390 l/min
 Main-Solder-wave flow: 510 l/min
 Bath temperature: 268°C
 Flux type: INTERFLUXE 2005C

Soldering with leaded materials (according to test results from ADC Krone)

Transport speed: 90 cm/min
 Spray flux dosage: 3.0
 Preheating: 208°C
 Chip-solder-wave-flow: 202 (315) l/min
 Bath temperature: 268°C
 Solder: L-Sn 60/40
 Flux type: L-3 Typ F-SW 34 DIN 8511

Performance parameters according EN 50173-1:2002

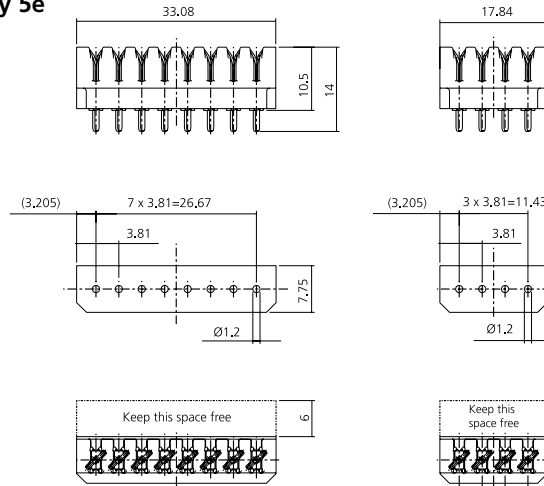
Frequency (MHz)	Next [dB]					Insertion Loss [dB]			
	Requirements		Typical measurements			Requirements		Typical measurements	
	Cat 5e	Cat 6	Cat 5e	Cat 6 shielded	Cat 6 unshielded	Cat 5e	Cat 6	Cat 5e	Cat 6
1.0	80.0	80.0	> 83.3	> 95.3	> 103.2	0.1	0.0	< 0.00	< 0.01
4.0	71.0	80.0	> 73.1	> 82.9	> 90.6	0.1	0.0	< 0.01	< 0.01
8.0	64.9	75.9	> 66.5	> 77.0	> 84.2	0.1	0.0	< 0.01	< 0.01
10.0	63.0	74.0	> 64.7	> 75.3	> 82.6	0.1	0.1	< 0.01	< 0.01
16.0	58.9	69.9	> 60.5	> 71.0	> 78.4	0.16	0.1	< 0.01	< 0.01
20.0	57.0	68.0	> 58.5	> 69.1	> 76.5	0.2	0.1	< 0.02	< 0.01
25.0	55.0	66.0	> 56.6	> 67.2	> 74.4	0.2	0.1	< 0.02	< 0.01
31.3	53.1	64.1	> 54.7	> 65.3	> 72.5	0.2	0.1	< 0.02	< 0.02
62.5	47.1	58.1	> 48.7	> 59.3	> 66.6	0.3	0.2	< 0.05	< 0.04
100.0	43.0	54.0	> 44.1	> 55.0	> 62.7	0.4	0.2	< 0.06	< 0.05
150.0	N/A	50.5	N/A	> 51.6	> 60.0	N/A	0.2	N/A	< 0.08
250.0	N/A	46.0	N/A	> 50.2	> 59.3	N/A	0.32	N/A	< 0.11

Ordering Information

Description	Catalogue Number
PCB-Module Category 5e, 8-pin	6048 1 080-00
PCB-Module Category 5e, 4-pin	6048 1 090-00
PCB-Module Category 6, 8-pin and additional screen contacts	6048 1 180-00
PCB-Module Category 6, 4-pin and additional screen contacts	6048 1 190-00

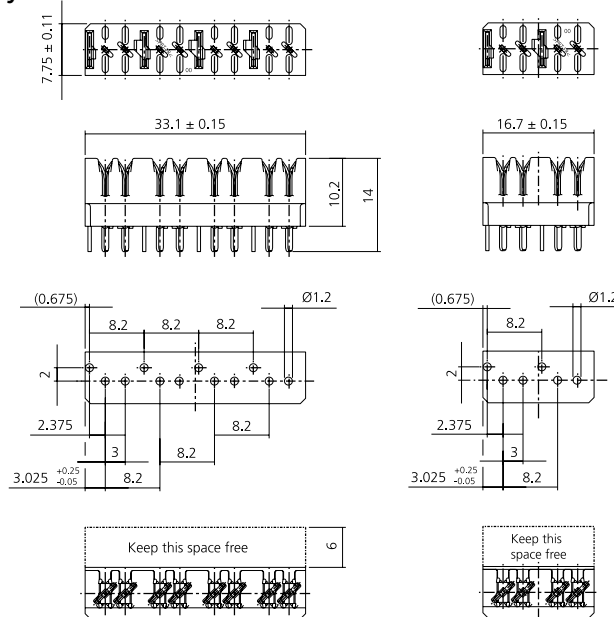
Colour coding and printed options on request

Category 5e



Category 6

(Dimensions in mm)



TECHNICAL DATA



Web Site: www.adckrone.com

UK Office: ADC Communications (UK) Ltd., Runnings Road, Kingsditch Trading Estate, Cheltenham, Gloucestershire GL51 9NQ, United Kingdom • Phone: +44 (0) 1242 264 400 Fax: +44 (0) 1242 264 488 contactuk@adckrone.com

South African Office: ADC Telecommunications (Africa) PTY Ltd., 16 Brand Hatch Close, Kyalami Business Park, Midrand, 1685, Johannesburg, South Africa • Phone: +27 11 466 3333 Fax: +27 11 466 3300 Email: infos@adckrone.com

EMEA Office: ADC GmbH, Beeskowdamm, 3-11, 14167 Berlin, Germany • Phone: +49 30 8453 1818 Fax: +49 30 8453 1703. For a listing of all ADC KRONE's global sales office locations, please refer to our web site.

Specifications published here are current as of the date of publication of this document. Because we are continuously improving our products, ADC KRONE reserves the right to change specifications without prior notice. At any time, you may verify product specifications by contacting ADC GmbH headquarters in Berlin. ADC Telecommunications, Inc. views its patent portfolio as an important corporate asset and vigorously enforces its patents.

Part Number 200002BE Oct 07 © 2007 ADC Communications (UK) Ltd. All Rights Reserved