

HDAS Series

The high performance and competitive PCB connector



High-density
1.905 mm
straggered
grid

Description

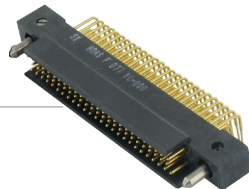
Amphenol reduces the pitch and increases the density of contacts with the brand new HDAS range. With its robust and simple design, high density and high performance to extreme conditions, HDAS is the right connector when installation, cost and reliability must be considered.

Main Features

High density and robust technology

- Dedicated to harsh environment
- Press-fit technology for significant assembly cost reduction and extreme reliability

100 % OPTIMIZED



- Lateral rails protecting male pins from external damages
- LCP material allowing all types of soldering processes
- Guiding/keying devices can be polarized in 6 positions within their own cavities : 26 keying possibilities per connector



100 % PERFORMING



- STARCLIP socket technology by AMphenol 6 times for better reliability
- HDAS has surpassed all MIL-DTL-55302 requirements
- Dedicated to high temperature and vibration levels

Markets



C4ISR



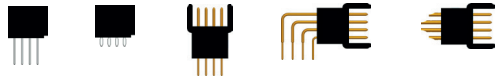
Military Aerospace



Commercial Aerospace

HDAS Range

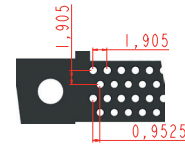
- 9 sizes available, from 3 to 6 rows, 50 to 402 signal contacts
- Terminations available



- Press fit solderless attachment technology available



- 1.905[.075] staggered grid
0.9525[.0375] offset
1.905[.075] between rows



Technical Specifications

MECHANICAL CHARACTERISTICS	
Backoff ¹ (mm)	1.2 [.0472] _{MAX}
Mating force per contact (N)	0.6 < f < 0.8
Unmating force per contact (N)	0.3 < F < 0.5
Durability cycles	500
Sinusoidal vibrations (20 to 2000 Hz) micro discontinuity 2ns	15 g
Random vibrations (600 to 700 Hz) micro discontinuity 2ns	2.682 g ² / Hz
Shocks micro discontinuity 2ns	100 g
Recommended tightening torques	
- nuts for Ø 2.5mm screws, brass (m.N)	0.25
- nuts for Ø 1.6mm screws, brass (m.N)	0.15

ENVIRONMENTAL CHARACTERISTICS	
Thermal shocks (°C)	-65 / +150
Salt Spray (hours)	96
Humidity	
Days	10
Temperature (°C)	25/65
Humidity rate (%)	90-95

ELECTRICAL CHARACTERISTICS	
Current rating per contacts (A)	4.5 (see derating curve)
Insulation resistance (GΩ)	5 _{MIN}
Contact resistance (mΩ)	10 _{MAX}
Dielectric Withstanding Voltage (Vrms)	750 _{MIN}

How to order

1.	2.	3.	4.	5.	6.	7.
Series	Connector type	Number of contacts	Contact termination	Deviation	Fitting / locking / Keying	Plating
HDAS	E	102	YD	-00	0	LF

1. Series

HDAS HDAS

2. Connector type

E Receptacle (Female contacts)
F Plug (Male contacts)

3. Number of contacts

3 Rows 050
077
119
152
4 Rows 102
202
236*
5 Rows 128*
198*
253

* Consult us, under development

4. Contact termination

YCS Right angle PC tail short (plug only)
YC Right angle PC tail standard (plug only)
YDS Straight PC tail short
YD Straight PC tail standard
Y* PC tail for soldering on flexible circuit
YP* Press fit / compliant
Z Solder cup, for test application only

5. Deviation

-00 Standard, by default
-50 Marking withstanding to VIGON
-01 Dip tinning (SnPb or SnAg) (plug only)
-02 PC tail organizer (YC* plug only)
-10 Stainless steel fitting
-60 -10 & -50 deviation combined
-20 Stainless steel fitting & rear potting

6. Fitting / Locking / Keying¹

Female fitting receptacle	0	Standard
	4	Intermediate (YDS receptacle only)
	D	¼ turn locking, locking on male fitting side Straight or right angle fitting according to contact termination, for PCB
	H	Locking by screw, locking on female fitting side Straight fitting for PCB or flexible circuit
Male fitting plug	I	Locking by screw, locking on female fitting side
	F	Locking by screw, locking on female fitting side Straight or right angle fitting according to contact termination, for PCB
	0	Standard
	2	No keying on male guide (plug only)
Male fitting plug	E	¼ turn locking, locking on male fitting side Straight fitting for cable or flexible circuit
	G	Locking by screw, locking on female fitting side Straight or right angle fitting according to contact termination, for PCB
	J	Locking by screw, locking on female fitting side Straight or right angle fitting according to contact termination, for chassis, motherboard, jumper or cable

7. Plating

Blank	Tin lead on receptacle Gold on plug -000 SnPb dip tinning on plug ²
LF	Bright pure Sn on receptacle (RoHS) SnAg dip tinning on plug ²
LFM	Matte pure Sn on receptacle (RoHS)

² Upon request

¹ Connectors are always delivered with non assembled fittings.

