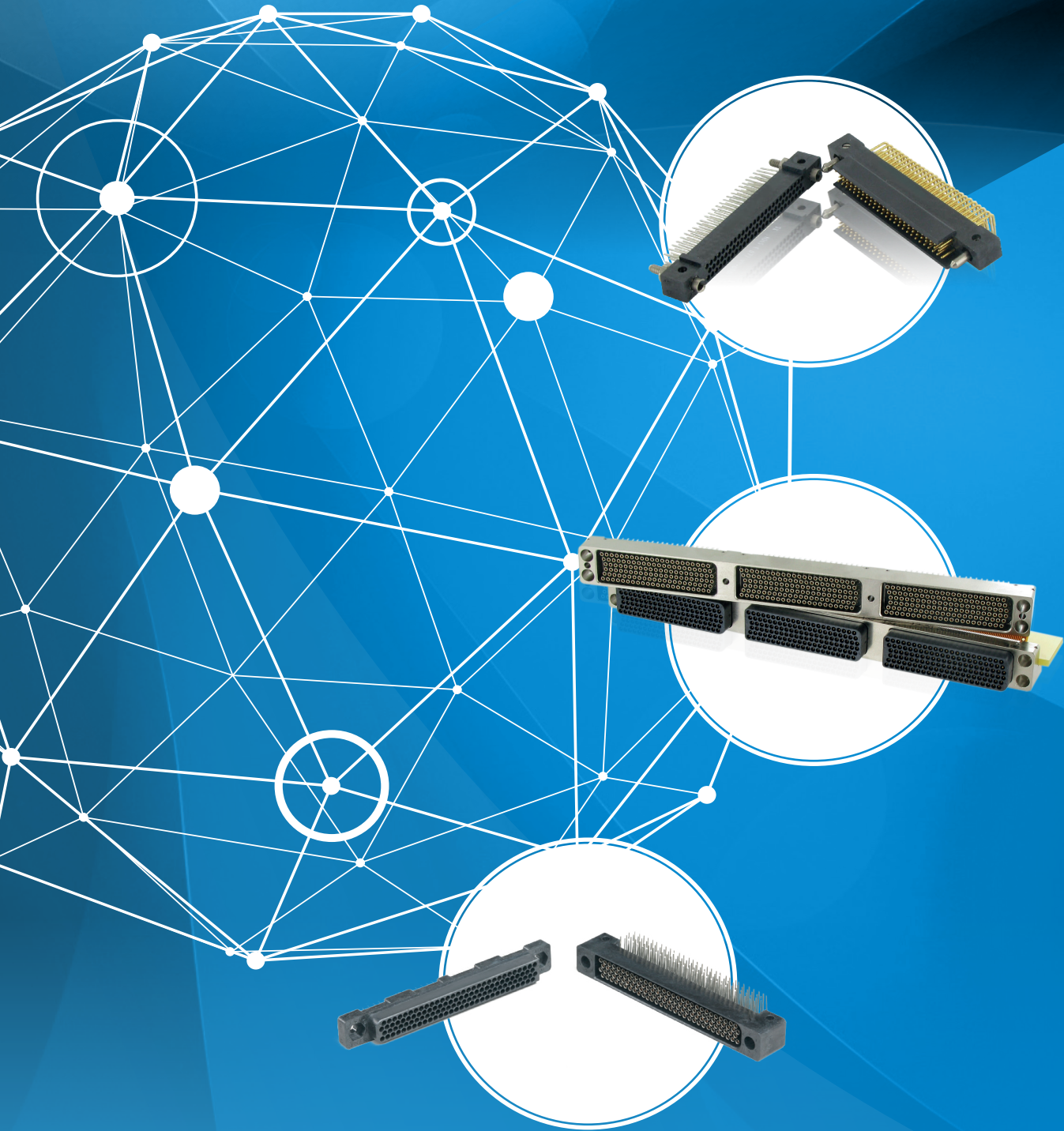
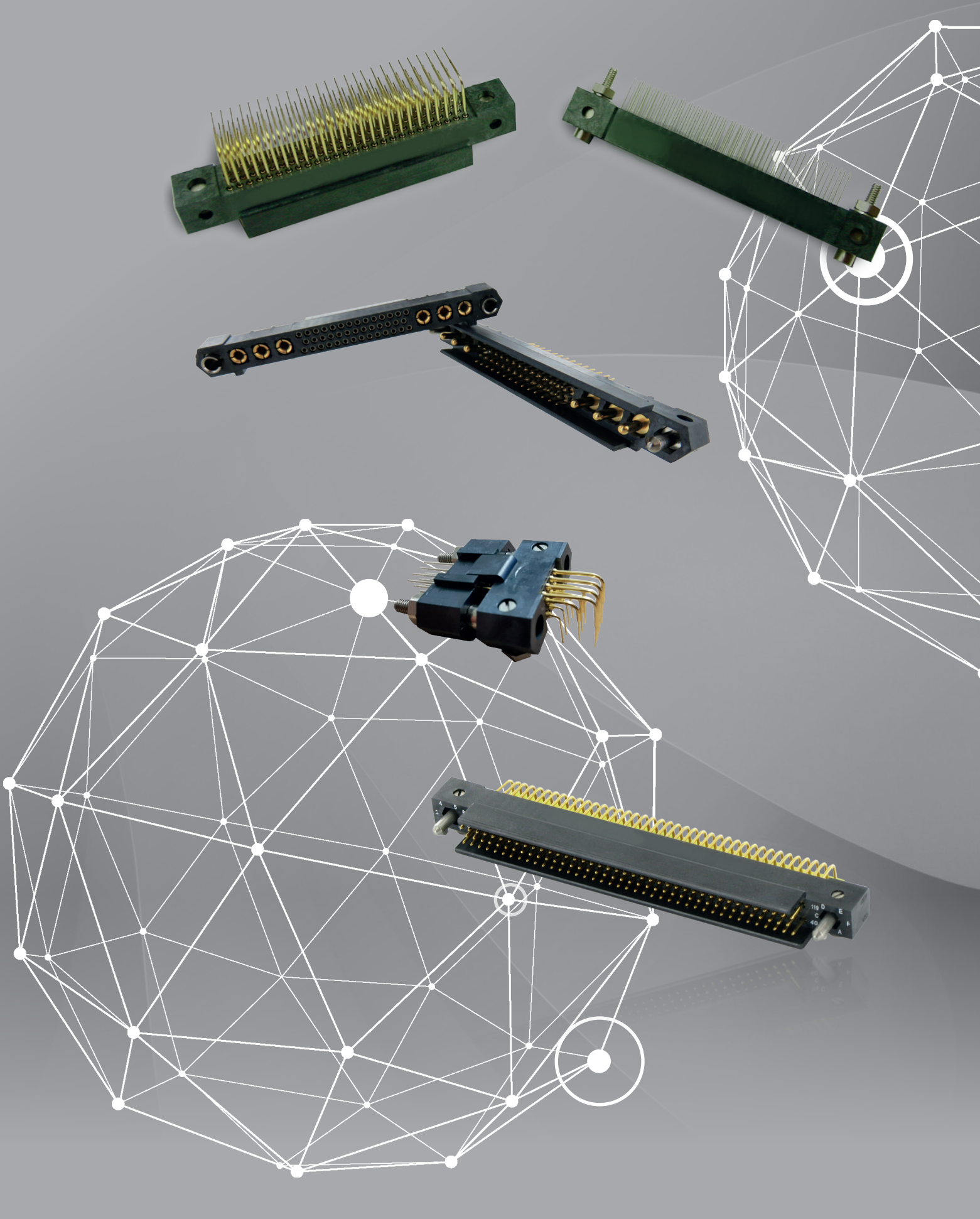


Board Level Products

Board to Board Interconnect Solutions





HDAS: Cost effective connector

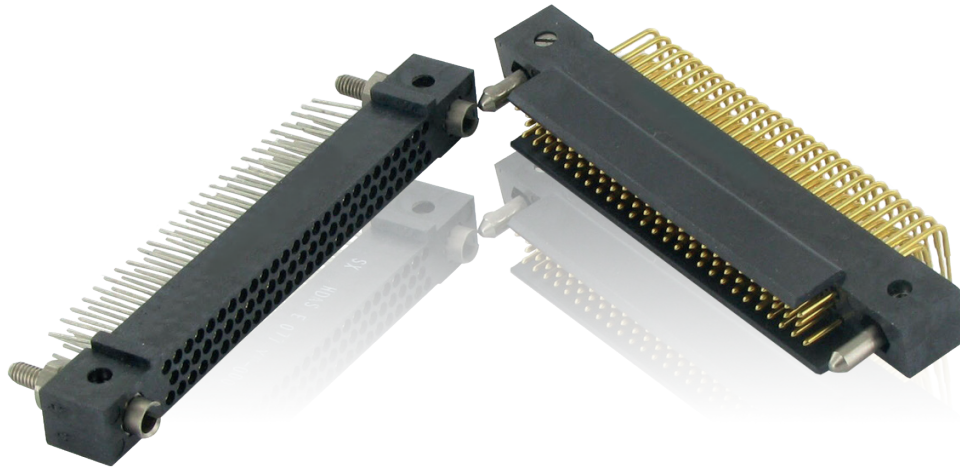


Table of contents

HDAS SERIES	13
General characteristics	14
Contacts (Female and male)	16
Fitting: keying / guiding	18
Keying / Guiding / Locking	20
Arrangements & layouts 3 rows	24
Arrangements & layouts 4 rows	23
Arrangements & layouts 5 rows	24
Weight	29
How to order	30

HDAS SERIES SERVES VARIOUS MARKETS, INCLUDING:



Commercial Aerospace



Military Aerospace



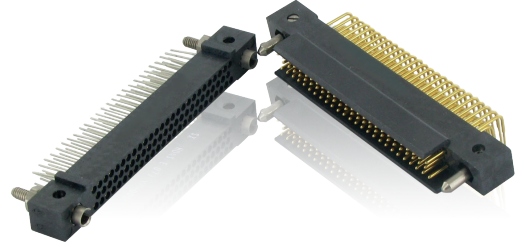
C4ISR

GENERAL CHARACTERISTICS - HDAS SERIES

Versatile connector

High density board to board range

- MIL-DTL-55302 performances
- 12 arrangements from 11 to 253 contacts
- Designed for severe mechanical environments
- 1.905mm pitch connector
- Mezzanine or right angle board to board connection
- Hybrid version to mix signal, coax & power contacts



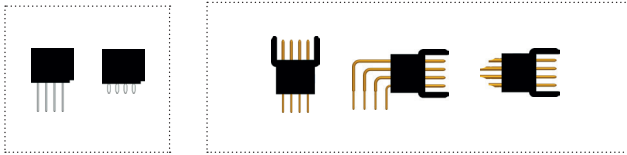
Main features

- Electrical security : 1.2mm
- Lateral rails to protect the male contacts from external damage
- Mechanical protection on the female contact by design
- Press fit / compliant assembly allowing cost reduction on the backplane
- 36 keying possibilities per connector

Contact terminations

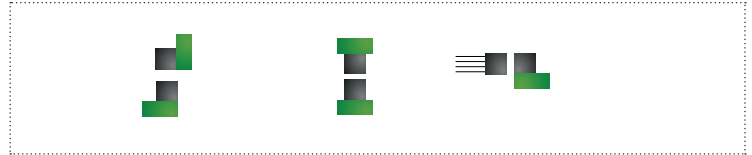
Female

Male

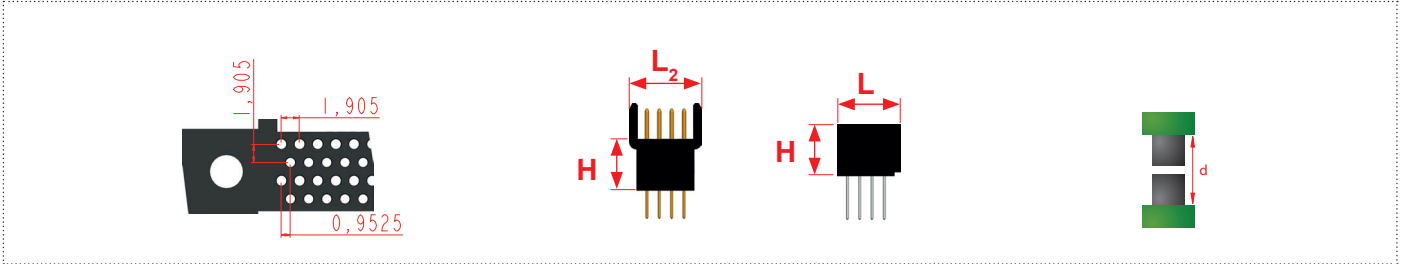


Recommended configurations

Mother board to daughterboard / Mezzanine / Board to cables

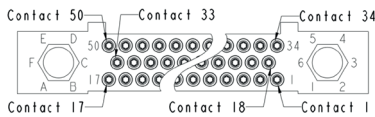


Overall Dimensions

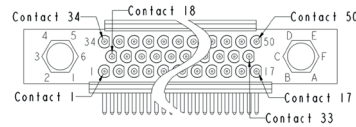


Contacts location for HDAS range - example with a 50 contacts connector

Receptacle view of mating face



Plug view of mating face



	3 rows	4 rows	5 rows
H	8 _{MAX} [.315]	8 _{MAX} [.315]	8 _{MAX} [.315]
L	8,11 _{MAX} [.323]	10,01 _{MAX} [.398]	11,92 _{MAX} [.473]
L2	9,36 _{MAX} [.369]	11,21 _{MAX} [.441]	13,17 _{MAX} [.519]
d	16 _{MAX} [.630]	16 _{MAX} [.630]	16 _{MAX} [.630]

All dimensions are given for information only and are in mm [inch], except as otherwise specified | *in mm: 1mm=0.03937 inch

GENERAL CHARACTERISTICS - HDAS SERIES

STANDARD / APPROVALS

- Exceed some MIL DTL 55302 requirements

TYPE OF CONTACTS

- High current rate: 4,5A per signal contact / DWV: 750 Vrms
- Clip socket technology
- 1,2mm [.0472] electrical security

CONNECTOR TYPES

- E = Female receptacle
- F = Male plug

CONTACT DENSITY

- High density: 1.905[.075] staggered grid (0.9525[.0375] offset), 1.905[.075] between rows

NUMBER OF ROWS / ARRANGEMENTS

- 3 rows: 11, 20, 29, 41, 41+6*, 50, 77, 119, 152 contacts
- 4 rows: 102 & 202 contacts
- 5 rows: 253 contacts

MALE CONTACT

Mating end diameter

- Ø 0.68 [.027]

Termination section

- Ø 0.45 [.018]



FEMALE CONTACT

- 6 contact tines
- Excellent mechanical and electrical reliability
- Better resistance to high vibrations
- Improved electrical conductivity



MATERIALS

Female contact

- Hood: machined brass alloy
- Clip: CuBe, stamped and formed

Male contact

- Machined brass alloy

Guiding devices

- Brass alloy or stainless steel 303
- Stainless steel 301 for latches

Plastic insert

- Thermoplastic LCP, 30% glass-fiber filled

PLATING

Female contact

- Hood: tin lead or lead free
- Clip: 1.27µm of gold over nickel

Male contact

- 1µm of gold over nickel

Guiding devices

- Electroless nickel or passivated

* Note :

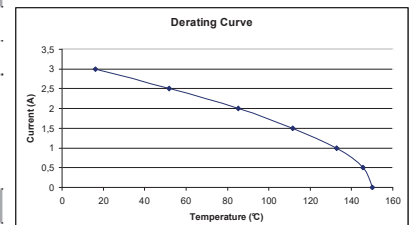
Hybrid configuration. Hybrid is identified as xx + yy, where xx is a signal contact and yy is the number of special contacts, chosen among 20 Amp power contact and coaxial contact.

Technical specifications

Mechanical characteristics	HDAS	MIL-DTL-55302 sections
Backoff ¹ (mm)	1.2 [.0472] _{MAX}	N/A
Mating force per contact (N)	0.6 < F < 0.8	§ 4.5.3
Unmating force per contact (N)	0.3 < F < 0.5	§ 4.5.3
Durability cycles	500	§ 4.5.9
Sinusoidal vibrations (200 to 2000 Hz) micro discontinuity 2ns	15 g	§ 4.5.10
Random vibrations (600 to 700Hz) micro discontinuity 2ns	1.2 g ² / Hz	§ 4.5.10
Shocks 6ms ½ sinus 2ns	100 g	§ 4.5.10
Environmental characteristics		
Thermal shocks (°C)	-65 / +150	§ 4.5.13
Salt Spray (hours)	144	§ 4.5.11
Humidity		
Days	10	§ 4.5.15
Temperature (°C)	25/65	
Humidity rate (%)	90-95	
Electrical characteristics		
Current rating per contacts (A)	4.5	§ 4.5.5
Insulation resistance (at 500Vdc) (GΩ)	5 _{MIN}	§ 4.5.8
Contact resistance (mΩ)	10 _{MAX}	§ 4.5.12
Dielectric Withstanding Voltage (Vrms)	750 _{MIN}	§ 4.5.7.1

Derating curve for 253 signal contacts connector

This curve show the ambient temperature to respect if you load simultaneously all contacts at the same current.



¹: When both connectors are fully mated, the backoff is the maximum distance the connectors can be unmated while functioning properly

All dimensions are given for information only and are in mm [inch], except as otherwise specified | *in mm: 1mm=0.03937 inch

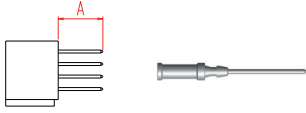
CONTACTS

Female contacts for receptacle

Straight PC tail

- Thru hole soldering
- Mother board or mezzanine connection

YD/YDS



Press fit / compliant

- For solderless assembly
- Mother board or mezzanine connection

YP



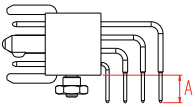
Contact type	A	Termination section	PCB thickness
YDS	4,6 ± 0,25 [.181 ± .010]	Ø 0,45 [.018]	3,5 _{MAX} [.138]
YD	6,8 ± 0,25 [.270 ± .010]	Ø 0,45 [.018]	5,5 _{MAX} [.217]
YP	3,1 ± 0,2 [.118 ± .008]	Ø 0,82 [.032]	1,6 _{MIN} [.063]

Male contacts for plug

Right angle PC tail

- Thru hole soldering
- Daughter board

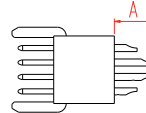
YC/YCS



Solder cup

- Soldering on wire
- AWG gauge 26 to 22
- For test application only

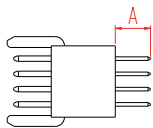
Z



Straight PC tail

- Thru hole soldering
- Daughter board or mezzanine connection

YD/YDS



Contact type	A	Mating end diameter	Termination section	PCB thickness
YDS	4,5±0,2 [.177±.008]	Ø0,68 [.027]	Ø0,45 [.018]	3,3 _{MAX} [.130]
YD	6,7±0,2 [.264±.008]	Ø0,68 [.027]	Ø0,45 [.018]	5,5 _{MAX} [.217]
YCS	2,85±0,2 [.112±.008]	Ø0,68 [.027]	Ø0,45 [.018]	1,6 _{MAX} [.063]
YC	4±0,2 [.157±.008]	Ø0,68 [.027]	Ø0,45 [.018]	2,8 _{MAX} [.110]
Z	5±0,2 [.197±.008]	Ø0,68 [.027]	Ø0,93 _{MAX} [.037]	/

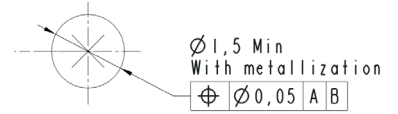
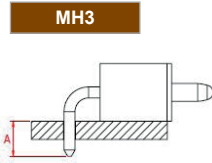
All dimensions are given for information only and are in mm [inch], except as otherwise specified | *in mm: 1mm=0.03937 inch

SPECIAL CONTACTS

Power contacts

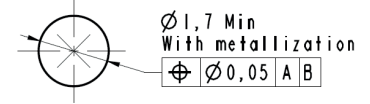
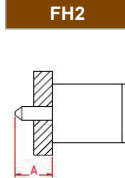
Male right angle PC tail 20A

- Thru hole soldering
- Daughter board



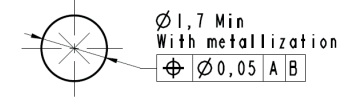
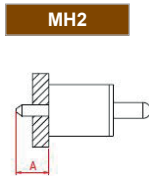
Female straight PC tail 20A

- Thru hole soldering
- Mother board



Male straight PC tail 20A

- Thru hole soldering
- Daughter board

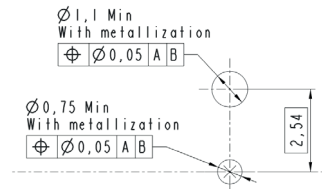
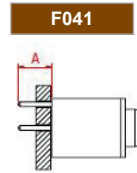


Power contacts		FH2/MH2	MH3
Current rating at 5V (A)	20	4.3 [.169]	3.8 [.150]
Contact resistance (mΩ)	12 _{max}	Ø1.4 [.055]	Ø1.2 [.047]
Contact retention (N)	50 _{min}	3.2 [.126]	2.8 _{max} [.110]
Insertion and extraction force per contact (N)	1 ≤ F ≤ 15	2 [.080] Ni + 1.0 [.039] Au	

Coaxial contacts

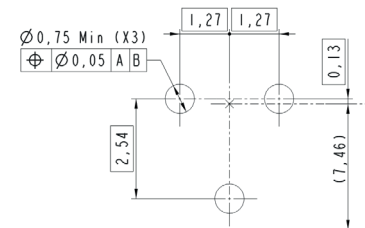
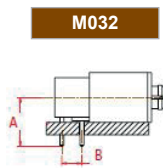
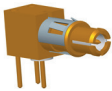
Female straight PC tail

- Thru hole soldering
- Mother board



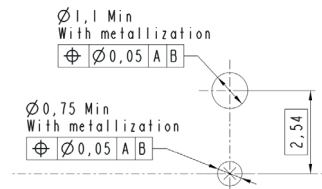
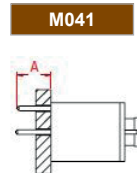
Male right angle PC tail

- Thru hole soldering
- Daughter board



Male straight PC tail

- Thru hole soldering
- Daughter board



Coaxial contacts		M041/F041	M032
Impedance (Ω)	50	4.35 [.171]	6.7 [.264]
Voltage rating (Vrms)	180	2.54 [.100]	2.54 [.100]
Current rating (mA)	500	2.8 _{max} [.110]	2.1 _{max} [.083]
Contact resistance (mΩ)	12max	2 [.080] Ni + 1.2 [.047] Au	
Frequency range (GHz)	0 to 1	2 [.080] Ni + 0.4 [.016] Au	
Contact retention (N)	50min		
Insertion and extraction force per contact (N)	1 ≤ F ≤ 15		

All dimensions are given for information only and are in mm [inch], except as otherwise specified | *1in mm: 1mm=0.03937 inch

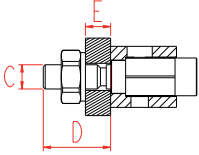
FITTING : KEYING / GUIDING

- Fittings are always delivered with connectors, non assembled.

Female fittings for receptacles

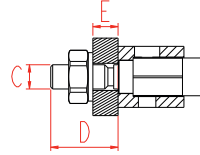
Female guides 0

- Standard female fitting codable for PCB thickness 5,5 max
- Chassis or mother board
- Fixed receptacle
- To order the fitting alone HDASE000



Female guides 4

- Shorter female fitting codable for PCB thickness 3,5mm max
- Chassis or mother board
- Fixed receptacle
- To order the fitting alone HDASE004

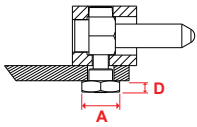


	0 style (standard fitting) for YD / YDS / YP female contacts	4 style (shorter fitting) for YD / YDS / YP female contacts
C		M 2.5 [.098]
D	7,15 ± 0.2 [.281 ± .008]	5,5 ± 0.2 [.217 ± .008]
E	5,5 MAX [.216]	3,5 MAX [.147]

Male fittings for plugs

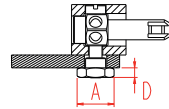
Guiding right angle connector 2

- Male fitting uncodable
- Daughter board
- To order the fitting alone, reference is HDASFYC-002. Only for 3 rows and 4 rows connectors. For 5 rows connectors (253 contacts) please consult us



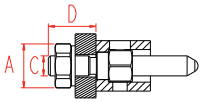
Keying and guiding right angle connector 0

- Standard male fitting codable
- Daughter board
- To order the fitting alone, reference is HDASFYC-000. Only for 3 rows and 4 rows connectors. For 5 rows connectors (253 contacts) please consult us



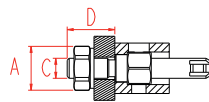
Guiding straight connector 2

- Motherboard or mezzanine connection
- Male fitting uncodable
- To order the fitting alone HDASFYD-002



Keying and guiding straight connector 0

- Standard male fitting codable
- Mother board or mezzanine connection
- To order the fitting alone HDASFYD-000



	2 style Guiding for YC / YCS male contacts	2 style Guiding for YD / YDS / YP male contacts	0 style Keying for YC / YCS male contacts	0 style Keying for YD / YDS / YP male contacts
A	Hex 4 [.157]	Hex 5 [.197]	Hex 4 [.157]	Hex 5 [.197]
C	/	M 2.5 [.098]	/	M 2.5 [.098]
D	1.2 MAX [.472]	5,75 ± 0,2 [.226 ± .008]	1.2 MAX [.472]	5,75 ± 0,2 [.226 ± .008]

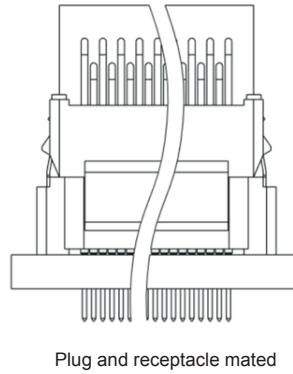
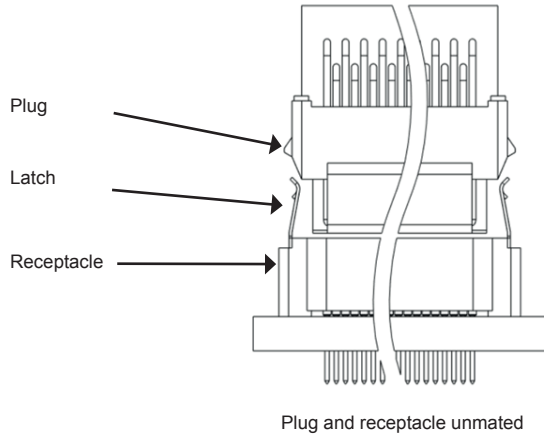
All dimensions are given for information only and are in mm [inch], except as otherwise specified | *in mm: 1mm=0.03937 inch

FITTING : KEYING / GUIDING

Latch fittings for receptacles

Latch guides

- Locking version
- Weight and space saving
- Unmating without tool
- Not solderable on PCB



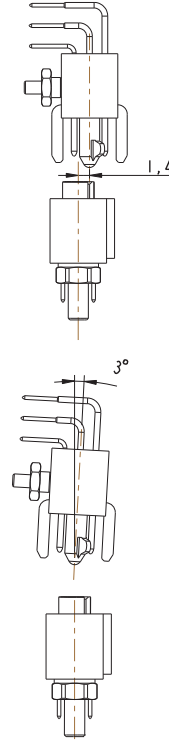
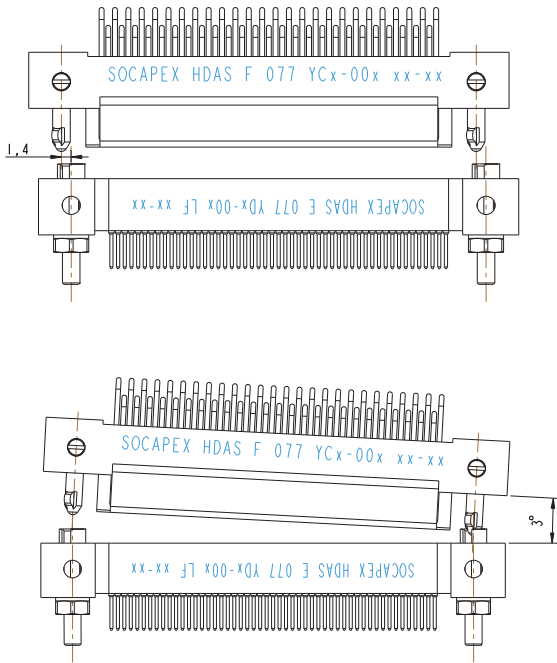
All dimensions are given for information only and are in mm [inch], except as otherwise specified | *in mm: 1mm=0.03937 inch

KEYING & GUIDING

Realignment capability

In the longitudinal axis

In the lateral axis



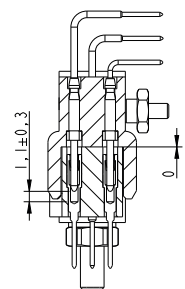
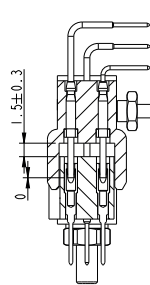
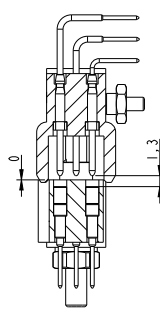
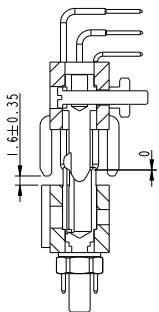
Mating sequence

Keying / guiding

Rails

Electrical contact

Mated connector



1,6 ± 0,35[.063 ± .014]

1,3[.051]

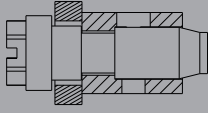
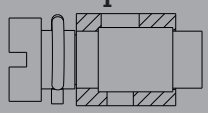
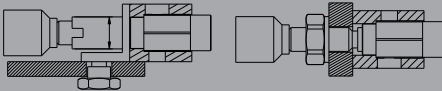
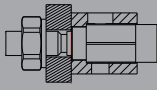
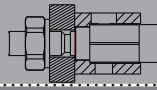






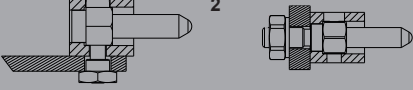
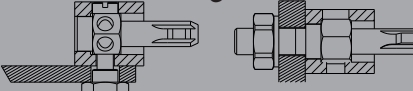
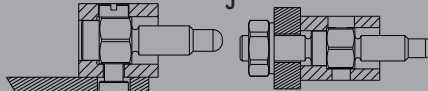
0,5 ± 0,3[.020 ± .012]

1,1 ± 0,3[.043 ± .012]

All dimensions are given for information only and are in mm [inch], except as otherwise specified | *in mm: 1mm=0.03937 inch

KEYING, GUIDING & LOCKING

Compatibility table

Compatible male fitting		Female fitting					Compatible male fitting		
J	X	X				X	J		
J							X	J	
G	X	X				X	X	X	G
0 2	X	X							
0 2	X	X							
Female contacts (receptacles)									Male contacts (plug)
						X	X	X	0 4
						X	X	X	0 4
F	X	X				X	X	X	F
I H	X	X				X	X	X	I H
Compatible female fitting	Male fitting					Compatible female fitting			

FITTING : KEYING / GUIDING / LOCKING

Female fittings

	Female fitting	For connector	Locking type	Locking side	Keying	Standard mounting	Fitting type	Mates with
D			¼ turn	Male fitting side (E)	✓	PCB	Straight or Right angled according to the contact terminations	E
H		Male plug and female receptacle	By screw	Female fitting side (H)	✗	PCB or flexible circuit	Straight	J
I				Female fitting side (I)		Wires		
F		Male plug and female receptacle	By screw	Female fitting side (F)	✓	PCB	Straight or Right angled according to the contact terminations	G
4								
0		Female receptacle only	✗	✗	✓	Mother board or mezzanine or flexible circuit	Straight	0 2

HDAS
SMASH
HDB/HSB
R-VPX
R-SATA
127/HEB

FITTING : KEYING / GUIDING / LOCKING

Male fittings

	Male fitting	For connector	Locking type	Locking side	Keying	Standard mounting	Fitting type	Mates with
0		Male plug only	X	X	✓	Daughter board or mezzanine or flexible circuit	Straight or Right angled according to the contact terminations	
2								
G			By screw	Female fitting side (F)	✓	PCB	Straight or Right angled according to the contact terminations	
E		Male plug and female receptacle	¼ turn	Male fitting side (E)		Wires or flexible circuit	Straight	
J			By screw	Female fitting side (H or I)	X	Chassis, motherboard, jumper or wire	Straight or Right angled according to the contact terminations	

HDAS

SMASH

HDB/HSB

R-VPX

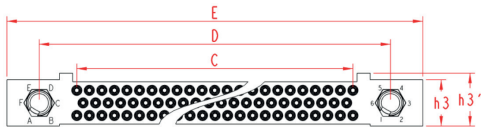
R-SATA

127/HE8

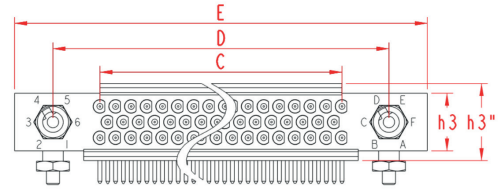
ARRANGEMENTS & LAYOUTS 3 ROWS

Arrangements – 3 rows

Receptacle



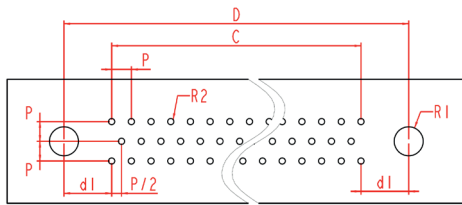
Plug



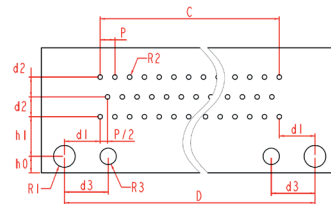
	11	20	29	41	050	077	119	152
C	5,715 [.225]	11,43 [.45]	17,145 [.675]	24,765 [.975]	30,48 [1.200]	47,625 [1.875]	74,295 [2.925]	95,25 [3.750]
D	14,945 [.588]	20,86 [.821]	26,375 [1.038]	33,995 [1.338]	41,91 [1.650]	59,055 [2.325]	85,725 [3.375]	106,68 [4.200]
E	23,04 _{MAX} [1.907]	28,95 _{MAX} [1.140]	34,5 _{MAX} [1.358]	42,1 _{MAX} [1.657]	51,3 _{MAX} [2.017]	68,38 _{MAX} [2.692]	95,05 _{MAX} [3.742]	116,5 _{MAX} [4.586]
h₃					7,01 _{MAX} [.276]			
h₃'					8,11 _{MAX} [.319]			
h₃''					9,36 _{MAX} [.369]			

Layouts – 3 rows

Straight plug & receptacle
YD/YDS/YP contacts



Right angle plug
YC/YCS contacts



The boards are shown from the connector side. All contact outputs are equidistant.

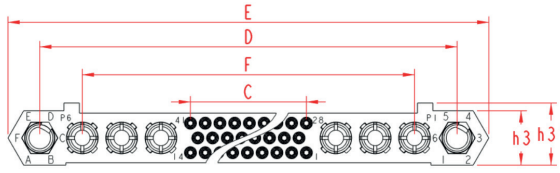
	11	20	29	41	050	077	119	152
C	5,715 [.225]	11,43 [.45]	17,145 [.675]	24,765 [.975]	30,48 [1.200]	47,625 [1.875]	74,295 [2.925]	95,25 [3.750]
D	14,945 [.588]	20,86 [.821]	26,375 [1.038]	33,995 [1.338]	41,91 [1.650]	59,055 [2.325]	85,725 [3.375]	106,68 [4.200]
d₁	4,615 [.182]	4,715 [.186]	4,615 [.182]	4,615 [.182]			5,715 [.225]	
d₂					2,54 [.1]			
d₃	4 [.157]	4 [.157]	5,65 [.222]	5,65 [.222]			/	
h₀					2,1 Max [.083]			
h₁					5,08 [.2]			
p					1,905 [.075]			
p/2					0,9525 [.038]			
R₁		Ø2,8 ± 0,1 [.11 ± .004]				Ø2,8 ^{+0,1} ₀ [.110 0 ^{+0,04} ₀]		
R₂					Ø0,6 _{MIN} [.024] with metallization			
					Ø0,6 ± 0,05 [.024 ± .002] for YP contacts			
R₃		Ø2,1 ± 0,05 [.083 ± .002]				/		

All dimensions are given for information only and are in mm [inch], except as otherwise specified | *in mm: 1mm=0.03937 inch

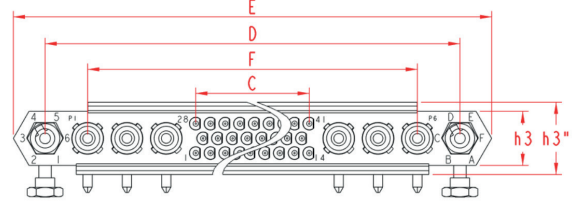
ARRANGEMENTS & LAYOUTS 3 ROWS

Arrangements – Hybrids 3 rows

Receptacle



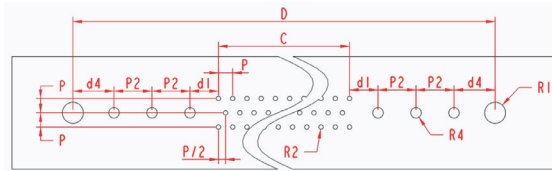
Plug



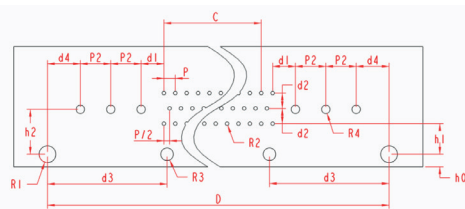
	41+6
C	24,765 [.975]
D	63,705 [2.508]
E	72 ^{MAX} [2.835]
F	52,705 [2.075]
h ₃	7,01 ^{MAX} [.276]
h ₃ '	8,11 ^{MAX} [.319]
h ₃ ''	9,36 ^{MAX} [.369]

Layouts – Hybrids 3 rows

Straight plug and receptacle
YD/YDS/YP contacts



Right angle plug
YC/YCS contacts



	41+6
C	24,765 [.975]
D	63,705 [2.508]
d ₁	3,81 [.15]
d ₂	2,54 [.1]
d ₃	20 [.787]
d ₄	5,5 [.217]
h ₀	2,1 [.083]
h ₁	5,08 [.2]
h ₂	7,46 [.294]
p	1,905 [.075]
p/2	0,9525 [.038]
P ₂	5,08 [.2]
R ₁	Ø2,8±0,1 [.11±.004]
R ₂	Ø0,6 _{Min} with metallization [.024] / Ø 0,6 ± 0,05 [.024 ± .002] for YP contacts
R ₃	Ø2,1±0,05 [.083±.002]
R ₄	See page 17, depending on the selected contact

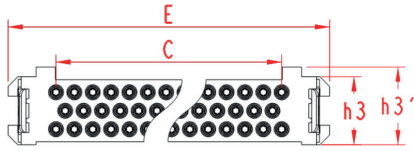
All dimensions are given for information only and are in mm [inch], except as otherwise specified | *in mm: 1mm=0.03937 inch

ARRANGEMENTS & LAYOUTS 3 ROWS - LATCHES

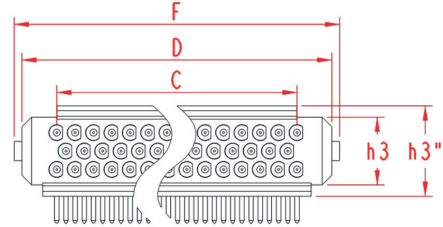
Arrangements – Latches 3 rows

HDAS
SMASH
HDB/HSEB
R-VPX
R-SATA
127/HEB

Receptacle



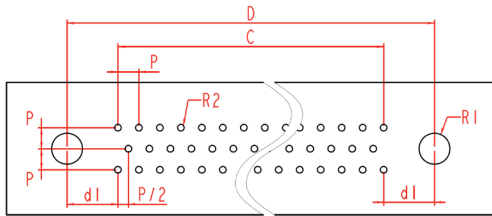
Plug



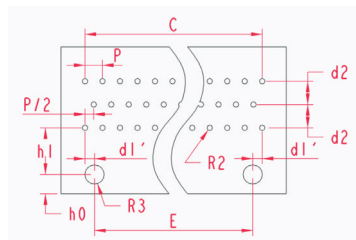
	11	20	29	41
C	5,715 [225]	11,43 [45]	17,145 [675]	24,765 [975]
E	15,65 _{MAX} [616]	21,36 _{MAX} [841]	27,1 _{MAX} [1.067]	34,7 _{MAX} [1.366]
F	14,85 _{MAX} [585]	20,56 _{MAX} [810]	26,28 _{MAX} [1.035]	33,9 _{MAX} [1.335]
D	13,05 _{MAX} [514]	18,8 _{MAX} [740]	24,5 _{MAX} [965]	32,1 _{MAX} [1.264]
h₃			7,01 _{MAX} [276]	
h₃'			8,11 _{MAX} [319]	
h₃''			9,36 _{MAX} [369]	

Layouts – Latches 3 rows

Straight plug and receptacle
YD/YDS/YP contacts



Right angle plug
YC/YCS contacts



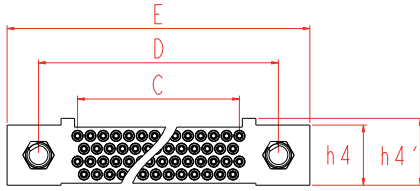
	11	20	29	41
C	5,715 [225]	11,43 [45]	17,145 [675]	24,765 [975]
D	11,015 [434]	16,73 [659]	22,445 [884]	30,065 [1.184]
E	5,015±0,025 [197±0,001]	10,73±0,025 [422±0,001]	15,075±0,025 [594±0,001]	22,695±0,025 [894±0,001]
d₁			2,65 [104]	
d₁'	0,35 [014]	0,35 [014]		1,035 [041]
d₂			2,54 [1]	
d₂/2			1,27 [05]	
h₀			2,1 _{MAX} [083]	
h₁			5,08 [2]	
p			1,905 [075]	
p/2			0,9525 [038]	
R₁			Ø2,1±0,05 [083±0,002]	
R₂		Ø0,6 _{Min} with metallization [024] / Ø0,6±0,05 [024±0,002] for YP contacts		
R₃			Ø2,1±0,05 [083±0,002]	

All dimensions are given for information only and are in mm [inch], except as otherwise specified | *in mm: 1mm=0.03937 inch

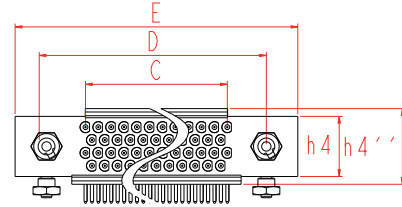
ARRANGEMENTS & LAYOUTS 4 ROWS

Arrangements – 4 rows

Receptacle



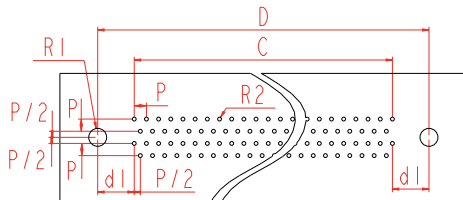
Plug



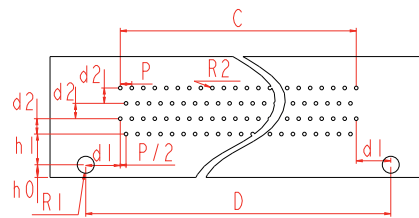
	102	202
C	47,625 _{MAX} [1.875]	95,25 _{MAX} [3.750]
D	59,175 _{MAX} [2.330]	106,68 _{MAX} [4.200]
E	68,50 _{MAX} [2.697]	116,5 _{MAX} [4.586]
h ₄		8,91 _{MAX} [.351]
h ₄ '		10,11 _{MAX} [.398]
h ₄ ''		11,26 _{MAX} [.443]

Layouts – 4 rows

Straight plug & receptacle
YD/YDS/YP contacts



Right angle plug
YC/YCS contacts



The boards are shown from the connector side. All contact outputs are equidistant.

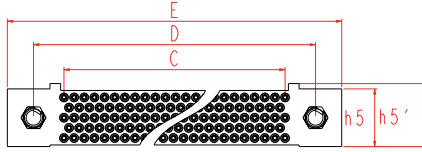
	102	202
C	47,625 [1.875]	95,25 [3.750]
D	59,175 [2.330]	106,68 [4.200]
h ₀		2,1 _{MAX} [.083]
h ₁		5,08 [2.00]
d ₂		2,54 [.100]
d ₂ /2		1,27 [.050]
p		1,905 [.075]
p/2		0,9525 [.0375]
d ₁	5,775 [.227]	5,715 [.225]
R ₁		Ø2,8 ^{+0,1} ₋₀ [.110 0 ^{+0,04} _{-0,000}]
R ₂		Ø0,6 _{MIN} [.024] with metallization Ø0,6 ± 0,05 [.024 ± .002] for YP contacts

All dimensions are given for information only and are in mm [inch], except as otherwise specified | *in mm: 1mm=0.03937 inch

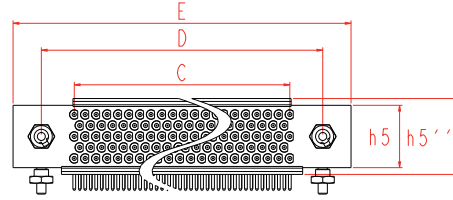
ARRANGEMENTS & LAYOUTS 5 ROWS

Arrangements – 5 rows

Receptacle



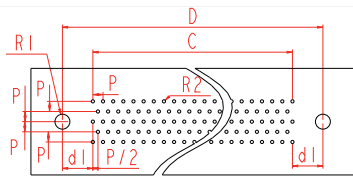
Plug



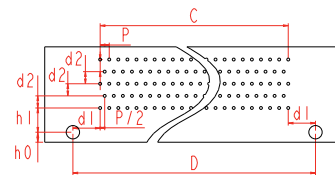
	253
C	95,25 [3.750]
D	106,68 [4.200]
E	116,5 _{MAX} [4.586]
h ₅	10,82 _{MAX} [.426]
h ₅ '	12,02 _{MAX} [.473]
h ₅ ''	13,17 _{MAX} [.519]

Layouts – 5 rows

Straight plug & receptacle
YD/YDS/YP contacts



Right angle plug
YC/YCS contacts



The boards are shown from the connector side. All contact outputs are equidistant.

	253
C	95,25 [3.750]
D	106,68 [4.200]
h ₀	2,1 _{MAX} [.083]
h ₁	5,08 [200]
d ₂	2,54 [100]
P	1,905 [.075]
p/2	0,9525 [.0375]
d ₁	5,715 [.225]
R ₁	$\varnothing 2,8^{+0,1}_{-0}$ [.110 0 ^{+0,04} _{-.000}]
R ₂	$\varnothing 0,6_{MIN}$ [.024] with metallization $\varnothing 0,6 \pm 0,05$ [.024 \pm .002] for YP contacts

All dimensions are given for information only and are in mm [inch], except as otherwise specified | *in mm: 1mm=0.03937 inch

WEIGHT

Connector type	Number of contacts	Commercial designation	Weight (in gram) ±15%	
Receptacle	050	HDASE050YD-000 / HDASE050YDS-000 / HDASE050YP-000	8	
	070	HDASE077YD-000 / HDASE077YDS-000 / HDASE077YP-000	11	
	102	HDASE102YD-000 / HDASE102YDS-000 / HDASE102YP-000	16	
	119	HDASE119YD-000 / HDASE119YDS-000 / HDASE119YP-000	15	
	152	HDASE152YD-000 / HDASE152YDS-000 / HDASE152YP-000	18	
	202	HDASE202YDS-000 / HDASE202YD-000 / HDASE202YP-000	23	
Plug	253	HDASE253YD-000 / HDASE253YDS-000 / HDASE253YP-000	27	
	050	HDASF050YD-000 / HDASF050YDS-000	9	
		HDASF050YC-000	11	
		HDASF050YCS-000	10	
	077	HDASF077YD-000 / HDASF077YDS-000	12	
		HDASF077YC-000	14	
		HDASF077YCS-000	13	
	102	HDASF102YD-000 / HDASF102YDS-000	13	
		HDASF102YC-000	17	
		HDASF102YCS-000	16	
	119	HDASF119YD-000 / HDASF119YDS-000	17	
		HDASF119YC-000	20	
		HDASF119YCS-000	19	
	152	HDASF152YD-000 / HDASF152YDS-000	22	
		HDASF152YC-000	25	
		HDASF152YCS-000	24	
	202	HDASF202YD-000 / HDASF202YDS-000	28	
		HDASF202YC-000	34	
		HDASF202YCS-000	32	
	253	HDASF253YD-000 / HDASF253YDS-000	33	
		HDASF253YC-000	42	
			HDASF253YCS-000	40

HDAS

SMASH

HDB/HDB

R-VPX

R-SATA

127/HE8

HOW TO ORDER - HDAS

1.	2.	3.	4.	5.	6.	7.	8.
Series	Connector type	Number of signal contacts	Contact termination	Hybrids	Deviation	Fitting / locking / Keying	Plating
HDAS	E	41	YD	6A	-00	0	LF

1. Series

HDAS HDAS

2. Connector type

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

3. Number of signal contacts

3 Rows	011
	020
	029
	041
	050
	077
	119
152	
4 Rows	102
	202
5 Rows	253

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
YP	Press fit / compliant (receptacle only)
Z	Solder cup, for test application only (plug only)

5. Hybrids

6A	with 6 special cavities (applicable only with 41 signal contacts)
Blank	if no special cavities

6. 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 (mandatory for latch)
-60	-10 & -50 deviation combined
-20	Stainless steel fitting & rear potting

* Not available for all configuration, please consult us.

7. Fitting / Locking / Keying ¹

Female fitting receptacle	0	Standard
	4	Intermediate
	D	¼ turn locking, locking on male fitting side Straight according to contact termination, for PCB
	H	Locking by screw, locking on female fitting side Straight fitting for PCB or flexible circuit
	I	Locking by screw, locking on female fitting side
	F	Locking by screw, locking on female fitting side Straight according to contact termination, for PCB
	L	Latch
Male fitting plug	0	Standard
	2	No keying on male guide (plug only)
	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
	L	Latch

8. Plating

Blank	Tin lead on receptacle Gold on plug -000 ✓ SnPb dip tinning on plug
LF	Bright pure Sn on receptacle ✓ SnAg dip tinning on plug ✓
LFM	Matte pure Sn on receptacle ✓

¹ Connectors are always delivered with non assembled fittings

✓: RoHS compliant



All dimensions are given for information only and are in mm [inch], except as otherwise specified | *in mm: 1mm=0.03937 inch

NOTES

HDAS

SMASH

HDB³/HSB³

R-VPX

R-SATA

127/HE8

Area with horizontal dashed lines for notes.

All dimensions are given for information only and are in mm [inch], except as otherwise specified | *in mm: 1mm=0.03937 inch

ABOUT AMPHENOL

Founded in 1932, **Amphenol** is one of the largest manufacturers of interconnect products in the world. The company designs, manufactures, and markets electrical, electronic, and fiber optic connectors, interconnect systems, and coaxial and specialty cables.

Amphenol has a diversified presence as a leader in high growth areas of the interconnect industry and provides solutions for customers in the automotive, broadband, industrial, information technology and data communications, military and aerospace, mobile devices, and mobile networks markets.

More info on www.amphenol.com

Amphenol
ENABLING THE ELECTRONICS REVOLUTION

Amphenol Military & Aerospace Operations (AMAO) has the largest and broadest selection of interconnect products in the military and aerospace markets.

More info on www.amphenolmao.com

Amphenol
MILITARY & AEROSPACE

Europe

FRANCE	Amphenol AIR LB	2 rue Clément Ader, ZAC de Wé - 08110 Carignan	+33 3 24 22 78 49
FRANCE	Amphenol SEFEE	Z.I. des Cazes – BP243 - 12402 Saint-Affrique Cedex	+33 5 65 98 11 00
GERMANY	Amphenol AIR LB GMBH	Am Kleinbahnhof 4 - 66740 Saarlouis	+49 6831 981 00
ITALY	Amphenol EUROPEAN SALES OPERATIONS	Via Barbaiana n.5 - 20020 Lainate - Milano	+39 293 254 214
UNITED KINGDOM	Amphenol INVOTEC	Unit 1-3, Hedging Lane Industrial Estate, Dosthill - Tamworth, B77 5HH	+44 1827 263 000
UNITED KINGDOM	Amphenol IONIX SYSTEMS	Prospect House, Taylor Business Park, Risley, Warrington, WA3 6HP	+44 1 942 685 200
UNITED KINGDOM	Amphenol LTD	Thanet Way, Whitstable - KENT, CT53JF	+44 1227 773 200
UNITED KINGDOM	Amphenol MARTEC	St Augustines Business Park, Swalecliffe Whitstable - Kent CT5 2QJ	+44 1227 793 733

North America

CANADA	Amphenol CANADA	605 Milner avenue - Toronto, Ontario	+1 416 291 0647
USA	Amphenol AEROSPACE OPERATIONS	40-60 Delaware street - Sidney, NY 13838	+1 800 678 0141
USA	Amphenol BORISH TECHNOLOGIES	4511 East Paris AVE - Grand Rapids, MI 49512	+1 616 554 9820
USA	Amphenol FSI	1300 Central Expwy N, Suite 100 - Allen, TX 75013	+1 214 547 2400
USA	Amphenol GRIFFITH ENTERPRISES	6000 East Coury Drive - Cottonwood, AZ 86326	+1 928 634 3685
USA	Amphenol NEXUS TECHNOLOGIES	50 Sunnyside Avenue - Stamford, CT 06902	+1 203 327 7300
USA	Amphenol PCD	72 Cherry Hill Drive - Beverly, MA. 01915	+1 978 624 3400
USA	Amphenol PRINTED CIRCUIT	Board Technology, 91 Northeastern Boulevard - Nashua, NH 03062	+1 603 324 4500
USA	Amphenol SV MICROWAVE	2400 Centrepark West Drive - West Palm Beach, FL	+1 561 840 1800
USA	Amphenol TIMES MICROWAVE	358 Hall Avenue - Wallingford, CT 06492	+1 800 867 2629

Asia

CHINA	Amphenol PCD CO.	Building 21, 1 st Liao Keng Industrial Zone, Shi Yan Street - Bao An District - Shenzhen 518108	+86 755 8173 8000/8286
INDIA	Amphenol INTERCONNECT INDIA	105 Bhosari Industrial Area - Pune 411 026	+91 20 27120363
JAPAN	Amphenol JAPAN	471-1, Deba, Ritto-City - Shiga 520 3041	+81 77 553 8501
KOREA	Amphenol DAESHIN	558 SongNae-Dong SoSa-Gu, Bucheon-city, Kyunggi-Do - 420-130	+81 32 610 3830/3845
SINGAPORE	Amphenol EAST ASIA	26/F, Railway Plaza, 39 Chatham Road South, Tsim Sha Tsui, Kowloon, Hong Kong	+65 6294 2128

Other Areas

AFRICA	Amphenol AFRICA	30 Impala Rd - Sandton 2146	+27 82 410 5179
ARGENTINA	Amphenol ARGENTINA	Av. Callao 930 2do piso Oficina B "Plaza" C1023 - AAP Buenos Aires	+54 11 4815 6886
AUSTRALIA	Amphenol AUSTRALIA PTY	2 Fiveways Blvd., Keysborough - Melbourne - Victoria 3173	+61 3 8796 8888
BRAZIL	Amphenol DO BRAZIL	Rua Diogo Moreira, 132, 20 andar, rooms 2001-2-3	+55 11 3815 1003
ISRAEL	Amphenol BAR-TEC	3 Hagavish Street, K fir-Barkan Bldg. East Industrial Zone - Kfar-Sava, 44102	+972 9 764 4100
MEXICO	Amphenol OPTIMIZE	Carretera Internacional Km 6.5, Col. Parque Industrial, Nogales, Sonora. C.P. 84094	+52 631 311 160
NEW ZEALAND	Amphenol PHITEK	Level 4, 2 Kingdon Street, Newmarket, Auckland 1023	+64 9 524 2984
RUSSIA	Amphenol RUSSIA	Yaroslavskaja Street 8 - 129164 Moscow	+7 495 937 6341
TURKEY	Amphenol TURKEY	Sun Plaza 15 Kat: 15 Maslak Hah. Bilim Sok. No.5 - Sisli/Istanbul, 34398	+90 212 367 92 19

Amphenol SOCAPEX



Amphenol Socapex

948, promenade de l'Arve BP29
74311 Thyez Cedex - France
Phone: +33 (0)4 50 89 28 00
contact@amphenol-socapex.fr
www.amphenol-socapex.com



For Technical Support

+33 (0)4 50 89 28 49
technicalsupport@amphenol-socapex.fr
www.amphenol-socapex.com/technical_support



To buy our products

+33 (0)4 50 90 28 00
contact@amphenol-socapex.fr
www.amphenol-socapex.com/amphenol/sales
Request a quote online at www.amphenol-socapex.com/quotation_request



Documentation

www.amphenol-socapex.com/documentation
To order a paper version of our catalogs, send an e-mail to communication@amphenol-socapex.fr



www.amphenol-socapex.com

Follow Amphenol Socapex on social media :    

This catalog uses paper from managed forests, PEFC & FSC labels, and is printed by a printer certified "Imprim'Vert®"

*We reserve the right to modify our products in any way we deem necessary.
Any duplication is prohibited, unless approved in writing.*

Designed by **Amphenol Socapex**
DOC-000090-ANG - July 2020

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Rectangular MIL Spec Connectors](#) category:

Click to view products by [Amphenol](#) manufacturer:

Other Similar products are found below :

[891-011-15SA2-BSST](#) [CTS-S16/16](#) [65002-062](#) [CY4602-000](#) [732-8020-01](#) [77058-22-55PN](#) [81542-20](#) [86.030.0053.0](#) [1241346-1](#) [RM252-020-311-2900](#) [DMC-M 08-16 SA](#) [1589051-4](#) [MSO34MPK1E1](#) [BACC65CAMA](#) [BACC65CP1PN](#) [BACI10BC0816PNBA](#) [HSB-D4S03DM222X](#) [2217548-1](#) [891-006-9PS-BST1T](#) [891-009-15SA2-BRT1T](#) [27963-20T12](#) [SIM2S100A](#) [1604996-2](#) [SMD25PN90L-4055](#) [1900ND08S1B00A](#) [22628-10-6P-791](#) [33526M11-08PD](#) [RE04-212S](#) [M32139/03-G05SN](#) [CTD160E01F-6148](#) [CTJ112E03B](#) [CTJ122E02D-8000](#) [CTJ-3D-12](#) [CTJ920E06N-513](#) [CTJ920E12N-513](#) [CTL-16-090](#) [RM300-000-581-0000](#) [CY4600-000](#) [CY4601-000](#) [38111-14-15SN](#) [38112-14-15PN](#) [MMA23-0111R1](#) [MMD25-0071P1](#) [33516062020](#) [33526M11-08PE](#) [DMC-M99-01AN](#) [Y59113WE20PNV00300](#) [ZPF000000000106310](#) [105979-31](#) [EN4165M01AD0G0](#)