



SMASH Series

High-Density and High-Performances PCB connector



Description

The SMASH connector is a very robust and highly reliable interconnect solution, perfectly suited to a wide range of applications and environments. It offers a high-density and highly modular solution, thanks to its 1.905mm [0.075"] pitched contacts, arranged in a chevron pattern and distributed across up to 6 rows. The connector features an aluminium shell that can house up to 3 electrical inserts, available in 2 sizes, allowing for up to 450 contacts depending on the configuration.

Main Features

RUGGEDIZATION

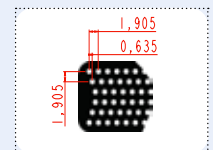
- Aluminium shell for electrical and environmental enhancements
- Ruggedized connector to meet extreme conditions in harsh environment

HIGH-PERFORMANCES

- Excellent mechanical, electrical and environmental reliability
- Extreme environmental performances
- Proven 6-fingers contact design to maintain electrical contact through high vibration and shock

HIGH-DENSITY AND MODULARITY

- 1.905mm [0.075] pitch on 6 rows and chevron grid pattern
- 2 electrical inserts sizes with 132 or 150 signal contacts
- 3 connector versions with 1, 2 or 3 electrical inserts
- 6 arrangements from 132 to 450 signal contacts
- Straight PC tail or Press fit contact termination available for plug and receptacle
- Flexible circuit termination of the plug can be used with daughter cards of various thicknesses



Online configurator & 3D model download

You can define references according to your needs and download directly 3D models in several formats on SMASH product page in our website www.amphenol-socapex.com or scan QR code :



Markets & Applications



Commercial Aerospace



Military Aerospace



C5ISR, Battlefield,
Ground Vehicles



Electronic &
Communication
Systems



Missiles

SMASH Series

Technical Specifications

MECHANICAL CHARACTERISTICS		MIL-DTL-55302 sections
Backoff ¹ (mm)	1.2 _{MAX} [.047]	-
Mating force per contact (N)	1	§ 4.5.4
Unmating force per contact (N)	0.4	
Durability cycles	500	§ 4.5.9
Sinusoidal vibrations (10 to 2000 Hz) micro discontinuity 2ns	15 g	§ 4.5.10
Random vibrations (600 to 700 Hz) no discontinuity greater than 2ns	2.682 g ² / Hz	EFA level
Shocks no discontinuity greater than 2ns	100 g / 6s	§ 4.5.14
ENVIRONMENTAL CHARACTERISTICS		
Thermal shocks (°C)	-65 / +150	§ 4.5.13
Number of cycles	5	
Salt Spray (hours)	96	§ 4.5.11
Humidity		
Days	10	§ 4.5.15
Temperature (°C)	25/65	
Humidity Rate (%)	90/98	
ELECTRICAL CHARACTERISTICS		
Current rating per contacts (A)	3 _{MAX}	§ 4.5.5
Insulation resistance (GΩ)	5 _{MIN}	§ 4.5.8
Contact resistance (mΩ)	10 _{MAX}	§ 4.5.12
Dielectric Withstanding Voltage (Vrms)	1000 _{MIN}	§ 4.5.7.1
Service voltage (at 50 Hz) (Vrms)	250	-

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

How to order

Series	1. Connector type	2. Number of signal contacts	3. Contact termination type	4. Deviation	5. Contact tail finish (for YD female)
HDC	E	150	YD	-000	LF

1. Connector type

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

2. Number of signal contacts

132	1 insert
150	
264	2 inserts
300	
396	3 inserts
450	

3. Contact termination type

	Male contact	Female contact
YD : Straight PC tail	Gold	Tin-lead or lead-free (See part 5.)
YP : Press fit / compliant	Gold	Tin-lead
U01 : SMT double sided	Pure-tin ✓	
Z: Solder cup	Tin-lead	

4. Deviation

-000	Standard
Consult us	Specific version (number of contacts, contact tail finish, specific assembly, ...)

5. Contact tail finish (for YD female)

Blank	Standard, by default
LF	Lead free plating for YD female contact ✓

✓ : RoHS compliant