

# 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

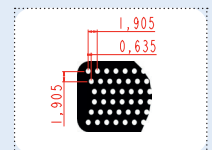
- Aluminium shell for electrical and environmental enhancements
- Ruggedized connector to meet extreme conditions in harsh environment

#### 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

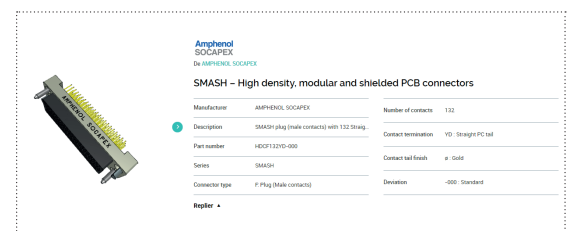
#### HIGH-DENSITY AND MODULARITY

- 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](http://www.amphenol-socapex.com) or scan QR code :



### Markets & Applications



Commercial Aerospace



Military Aerospace



Military Vehicle



Electronic & Communication Systems



Missiles & Weapons

# SMASH Series

## Technical Specifications

MECHANICAL CHARACTERISTICS		MIL-DTL-55302 sections
Backoff <sup>1</sup> (mm)	1.2 <sub>MAX</sub> [.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 <sup>2</sup> / 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 <sub>MAX</sub>	§ 4.5.5
Insulation resistance (GΩ)	5 <sub>MIN</sub>	§ 4.5.8
Contact resistance (mΩ)	10 <sub>MAX</sub>	§ 4.5.12
Dielectric Withstanding Voltage (Vrms)	1000 <sub>MIN</sub>	§ 4.5.7.1
Service voltage (at 50 Hz) (Vrms)	250	-

<sup>1</sup>: 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

