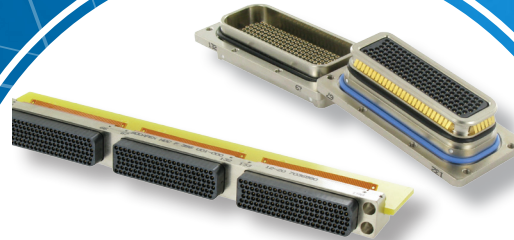


## SMASH series

### Advanced SEM E modular connector



### Description

The SMASH connector offers extremely high robustness where signal integrity is required. Based on an aluminium shell with 1, 2 or 3 bays, the SMASH connector can house up to 450 contacts. The chevron grid pattern provides high contact density for advanced electronics packaging. The metallic shell is equipped with grounding, guide pins, and keying devices to ensure mechanical reliability.

### Main Features

#### RUGGEDIZATION

- Aluminium shell for electrical enhancements
- Ruggedized connector to meet extreme conditions
- Dedicated to harsh environment

#### HIGH-DENSITY

- No tooling required. SEM E form factor
- Flexible circuit termination of the plug can be used with daughter cards of various thicknesses
- Modularity: various inserts can be housed within the robust and modular shell

#### HIGH-PERFORMANCES

- Excellent mechanical and electrical reliability
- STARCLIP socket technology by Amphenol integrated 6 times for better reliability

### Markets & Applications



C4ISR



Military Aerospace



Commercial Aerospace






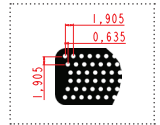
#### Applications :

- › Radar
- › Countear measure
- › FADEC
- › Radio

# SMASH series

## SMASH concept

- 3 versions available, with 1, 2 or 3 bays
- 3 inserts available (132, 150, 154 contacts)
- From 132 to 450 signal contacts
- Terminations available:
  - Female straight PC tail 
  - Female press fit solderless attachment 
  - Male SMT with flex termination 
  - Male straight PC tail
  - Male press fit solderless
- Chevron grid pattern
  - 1.905[.075] spacing along the row
  - 1.905[.075] between rows
  - 0.635 [.025] offset



## How to order

	1.	2.	3.	4.	5.
	Connector type	Number of signal contacts	Contact termination	Deviation	Contact plating
	<b>HDC</b>	<b>E</b>	<b>154</b>	<b>YC</b>	<b>000</b>

1. Connector type		2. Number of signal contacts		3. Signal contact termination type	
<b>R</b>	Plug (Male contacts)	<b>132</b>	1 cavity	<b>YC</b>	DC F right angle PC tail
		<b>150</b>		<b>YD</b>	DC E & HDC F PC tail standard length
<b>P</b>	Receptacle (Female contacts)	<b>154</b>	2 cavities	<b>U01</b>	DC F SMT double sided
		<b>264</b>		<b>YP</b>	DC E & HDCF press fit, under development
		<b>300</b>			
		<b>396</b>			
		<b>450</b>	3 cavities		

4. Deviation		5. Contact plating	
<b>000</b>	Standard (by default)	<b>Blank</b>	Standard
<b>Consult us</b>	(For specific versions)	<b>LF</b>	Lead free plating for ROHS connector

## Technical Specifications

MECHANICAL CHARACTERISTICS		MIL-DTL-55302 sections	
<b>Backoff<sup>1</sup></b> (mm)	1.2 <sub>MAX</sub> [.047]		N/A
<b>Mating force</b> per contact (N)	100g		§ 4.5.4
<b>Unmating force</b> per contact (N)	40g		§ 4.5.9
<b>Durability cycles</b>	500		§ 4.5.10
<b>Sinusoidal vibrations</b> (10 to 2000 Hz) micro discontinuity 2ns	15 g		Consult us
<b>Random vibrations</b> (600 to 700 Hz) micro discontinuity 2ns	2.682 g <sup>2</sup> / Hz		§ 4.5.14
<b>Shocks</b> micro discontinuity 2ns	100 g / 6s		
<b>Recommended tightening torques</b>			
- nuts for M2.5 screws, brass (m.N)	0.25		N/A
- nuts for M2 screws, brass (m.N)	0.2		N/A
ENVIRONMENTAL CHARACTERISTICS			
<b>Thermal shocks</b> (°C)	-65 / +150		§ 4.5.13
Cycles	5		§ 4.5.11
<b>Salt Spray</b> (hours)	96		
ELECTRICAL CHARACTERISTICS			
<b>Current rating</b> per contacts (A)	3 <sub>MAX</sub>		§ 4.5.5
<b>Insulation resistance</b> (GΩ)	5 <sub>MIN</sub>		§ 4.5.8
<b>Contact resistance</b> (mΩ)	10 <sub>MIN</sub>		§ 4.5.12
<b>Dielectric Withstanding Voltage</b> (Vrms)	1000 <sub>MIN</sub>		§ 4.5.7.1
<b>Service voltage</b> (at 50 Hz) (Vrms)	250		N/A

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

