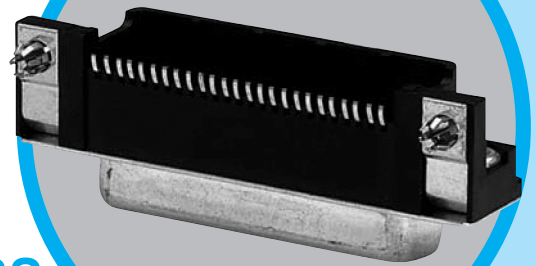


# SM2

D-Sub connectors - Stamped and Formed Contacts



## SURFACE MOUNT CONNECTORS

CHARACTERISTICS

### Specifications

- Connectors according to MIL C24308 - NFC 93425-HE5

Materials and Platings	
<b>Shells</b>	Steel with tin plating
<b>Insulator</b>	High temperature (peak at 260°C) glass-filled thermoplastic, UL 94V-0
<b>Socket contact</b>	Stamped and formed brass, selected gold in mating area; 2.54µm (100µ") min. tin on termination area, with entire contact under-plated 1.27µm (50µ") min. nickel
<b>Rear insert</b>	Brass, 3µm up to 5µm (118µ" up to 197µ") tinned over nickel 2µm up to 3µm (78µ" to 118µ")
<b>Boardlock</b>	Tin plating 4µm up to 6µm (157µ" up to 236µ") over nickel 2µm up to 3µm (78µ" up to 118µ"), insertion force: Low Insertion Force = LIF (bronze) Zero Insertion Force = ZeFo (bronze)
<b>Screwlock</b>	Brass, 6µm up to 10µm (236µ" up to 394µ") tinned over nickel 2µm up to 3µm (78µ" up to 118µ")
<b>Grounding</b>	Grounding strap: brass, 4µm up to 6µm tin plating over nickel 2µm up to 3µm (78µ" up to 118µ")

Electrical Data	
<b>Current rating</b>	3A
<b>Voltage rating</b>	300V AC/rms 50Hz
<b>Withstanding voltage</b>	1000V AC/rms 50Hz for one minute
<b>Insulation resistance</b>	5000MΩ
<b>Contact resistance</b>	10mΩ max

Climatic Data	
<b>Operating temperature</b>	85°C, peak at 105°C
<b>Damp heat</b>	56 days (40°C - 95% HR)

Mechanical Data	
<b>Single contact insertion force</b>	1.2N < F < 2.5N
<b>Single contact withdrawal force</b>	0.4N min
<b>LIF boardlock</b>	8N max per connector
<b>Coplanarity of contacts</b>	0.2mm (.008") max

**Mating and unmating force**  
Unit: N

No. of Cts	Mate (max)	Unmate (min)
9 (size E)	30	3.5
15 (size A)	50	4.5
25 (size B)	83	8.0

DESCRIPTION

Amphenol SMT D-Sub is offered in right angle, receptacle with brackets, as an industry standard for I / O connections.

Boardlock features:

- LIF (Low Insertion Force) boardlock especially designed to be fully compatible with pick and place machine.
- ZeFo (Zero Force Insertion) boardlock has been designed so that once placed and expanded, secures a safe locking.

*Designed for  
Pick and Place  
SMT process*

APPLICATIONS

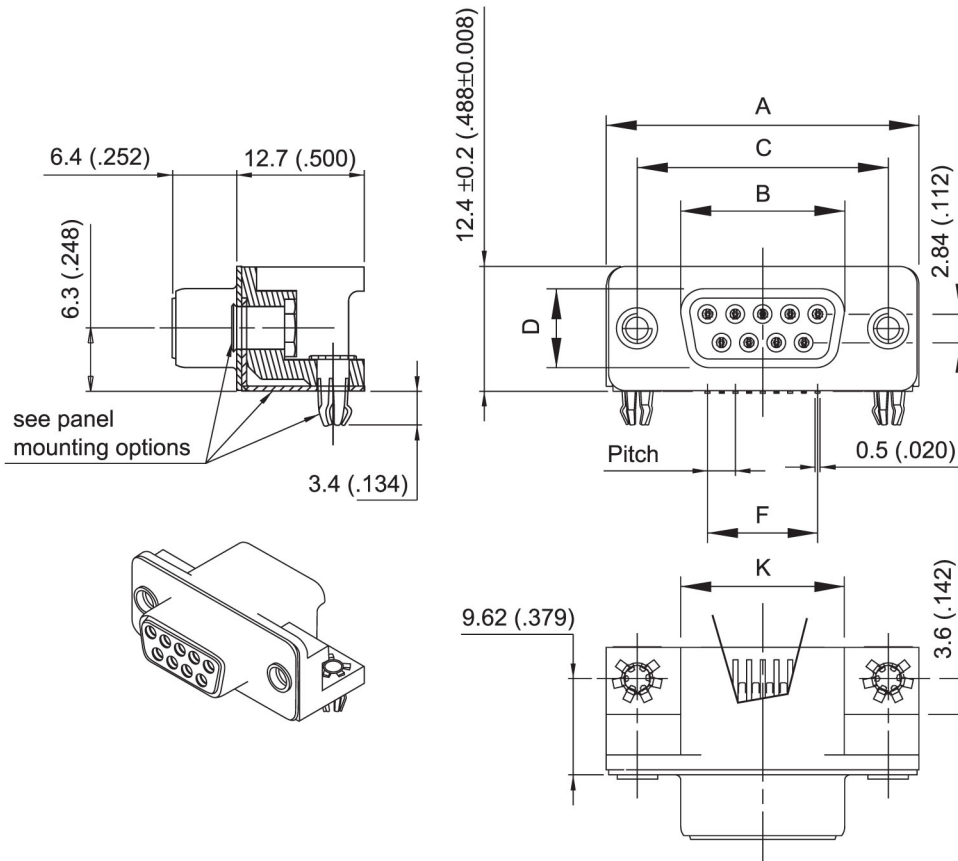
- Industrial
- Telecom
- Any industry standard I / O connections



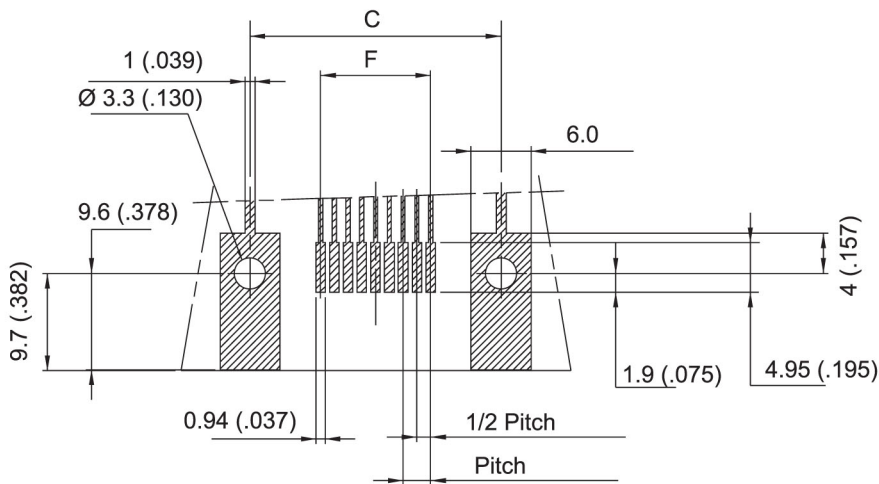
**Amphenol**

SM2 / E2

## Shell Size Dimensions



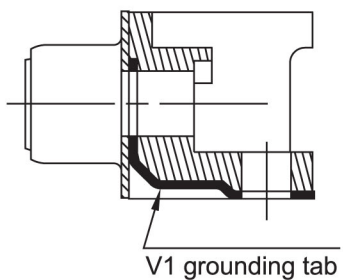
## PCB LAYOUT



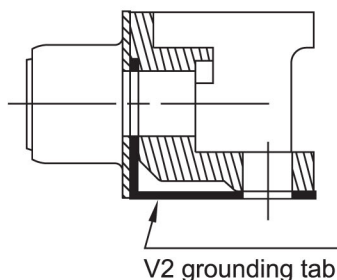
SHELL SIZE	mm (inch)						
	A +0.05 (.002) -0.1 (.004)	B 0 -0.2 (.008)	C ±0.1 (.004)	D 0 -0.25 (.01)	PITCH	F	K
E	31.15 (1.226)	16.4 (.645)	25 (.984)	8.03 (.316)	2.74 (.1078)	10.97 (.432)	16.3 (.642)
A	39.4 (1.551)	24.8 (.976)	33.3 (1.311)	8.03 (.316)	2.74 (.1078)	19.2 (.756)	24.6 (.968)
B	53.3 (2.098)	38.5 (1.515)	47 (1.850)	8.03 (.316)	2.76 (.1086)	33.12 (1.304)	38.3 (1.508)

**Panel mounting option**

**GROUNDING TABS:**

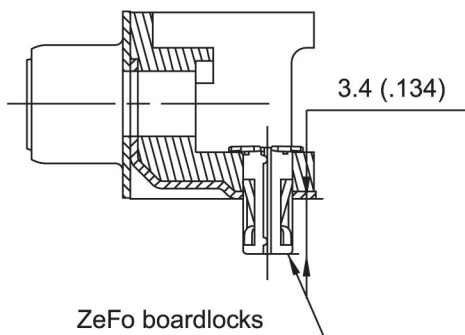


V1 grounding tab

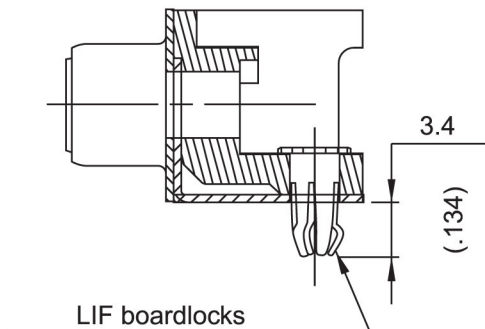


V2 grounding tab

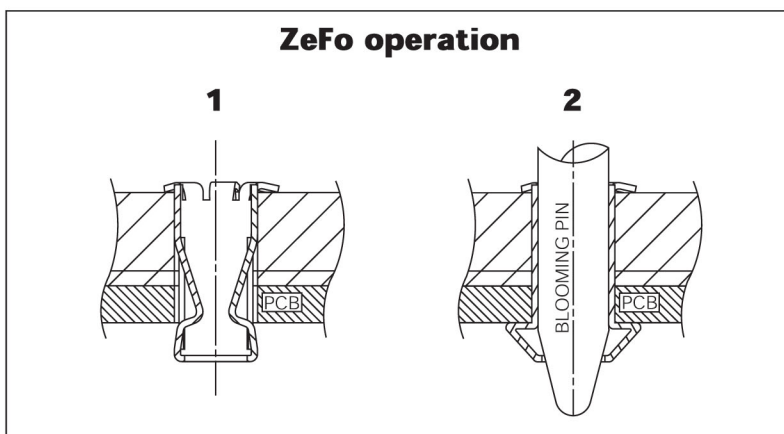
**BOARDLOCKS:**



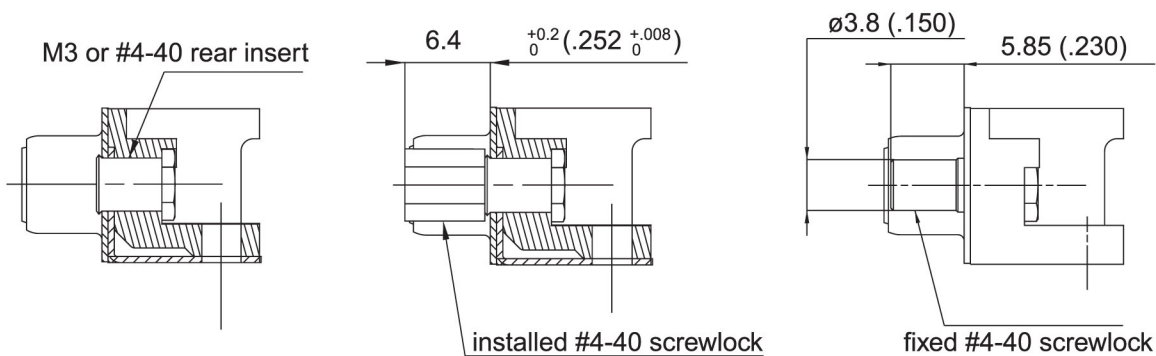
ZeFo boardlocks



LIF boardlocks



**FLANGES ACCESSORIES:**



Threaded Rear

**1/2**

Installed Front Female

**5**

Fixed Front Female

**6**



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