

# BMA SERIES

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# AGENDA

## WHAT DOES BMA MEAN ?

### MAIN MARKETS AND APPLICATIONS

### KEY BENEFITS

### PRODUCT DETAILS

Radiall Product Portfolio

Main Features

Performances

Available Configurations

### MARKETING TOOLS

### VIDEO PRESENTATION

# WHAT ARE BMA CONNECTORS ?

## Blind Mate Connectors

BMA connectors are suitable for high-frequency rack and panel applications including active electronically scanned array antennas, military microwave modules, radars, rack and panel telecommunication equipment.



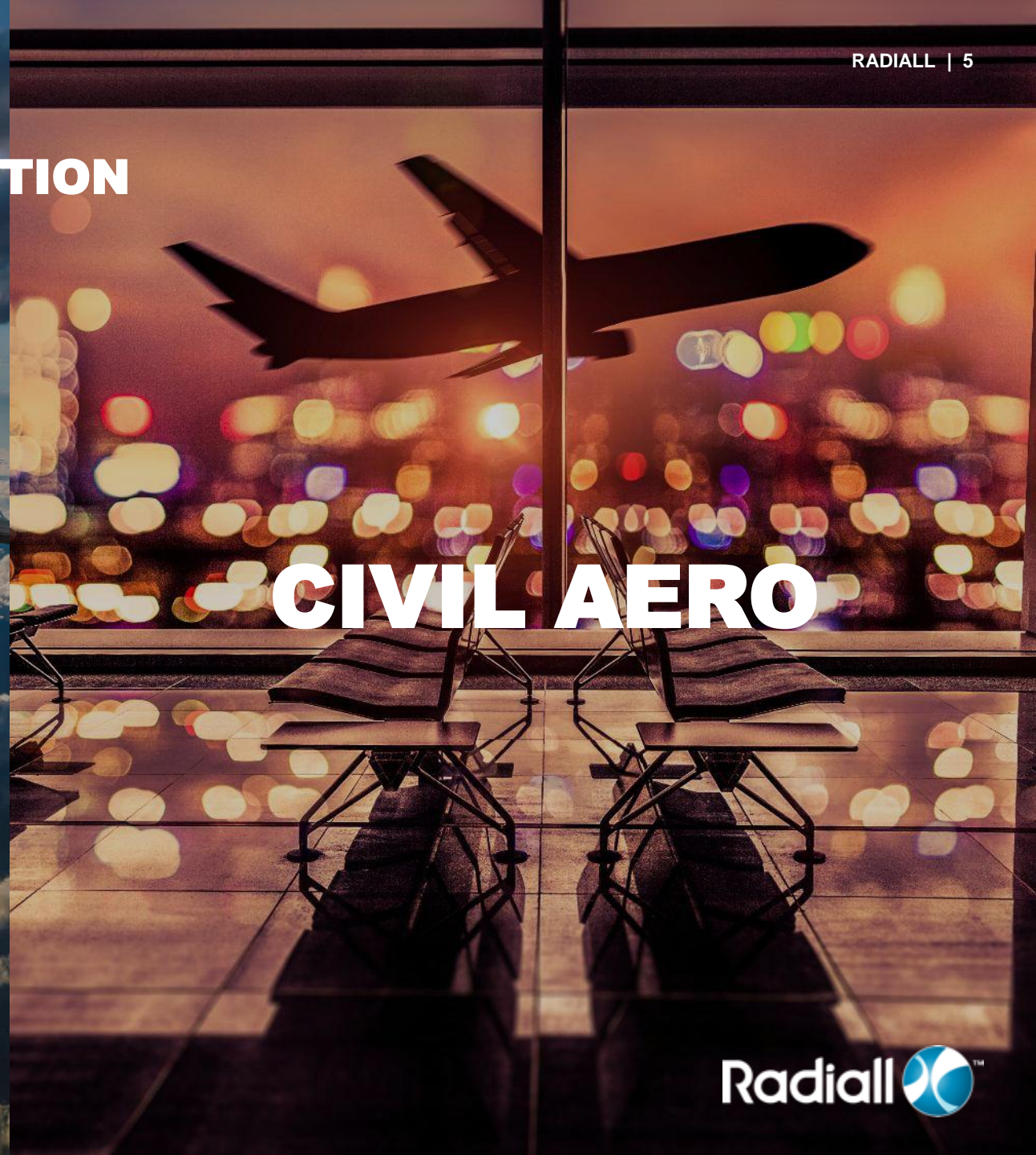
## KEY FEATURES

- Blind mate connector
- Slide-on coupling
- High frequency : up to **22 GHz**
- Available in 2 variations : **fixed or floating**

# MARKET APPLICATION INTRODUCTION



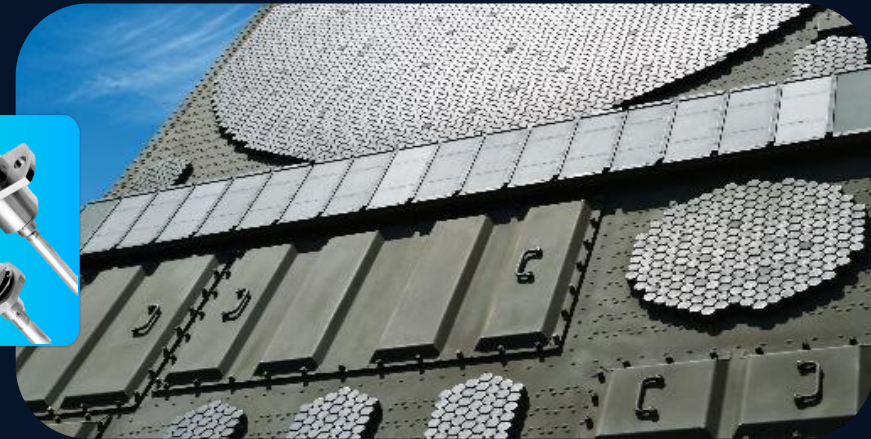
## DEFENSE



## CIVIL AERO

## MARKET APPLICATION INTRODUCTION

- Airborne and ground radars
- Electronically scanned array antennas
- Telecommunications equipment
- Military or civilian microwave modules
- Multiple interconnection systems



## MARKET APPLICATIONS

- Avionics Rack Systems
- Weather Radars and Detection Systems
- Phased Array Antennas
- In-Flight Entertainment (IFE) Systems



*BMA is primarily used where space is tight or where maintenance must be performed rapidly via "plug-and-play" modules*

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## KEY BENEFITS



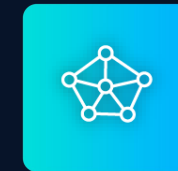
### **BLIND-MATE DESIGN FOR EASY ASSEMBLY**

- Slide-on
- Blind-mate mechanism
- No precise alignment required



### **HIGH-FREQUENCY PERFORMANCE**

- Up to 22 Ghz
- Low insertion
- Excellent signal integrity



### **HIGH-DENSITY APPLICATIONS**

- Compact size
- Floating capability

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# PRODUCT DETAILS – RADIALL PRODUCT PORTFOLIO

## BMA

(R128)



## BMA-COM

(R128 xxx 7xx et R128 xxx 8xx)



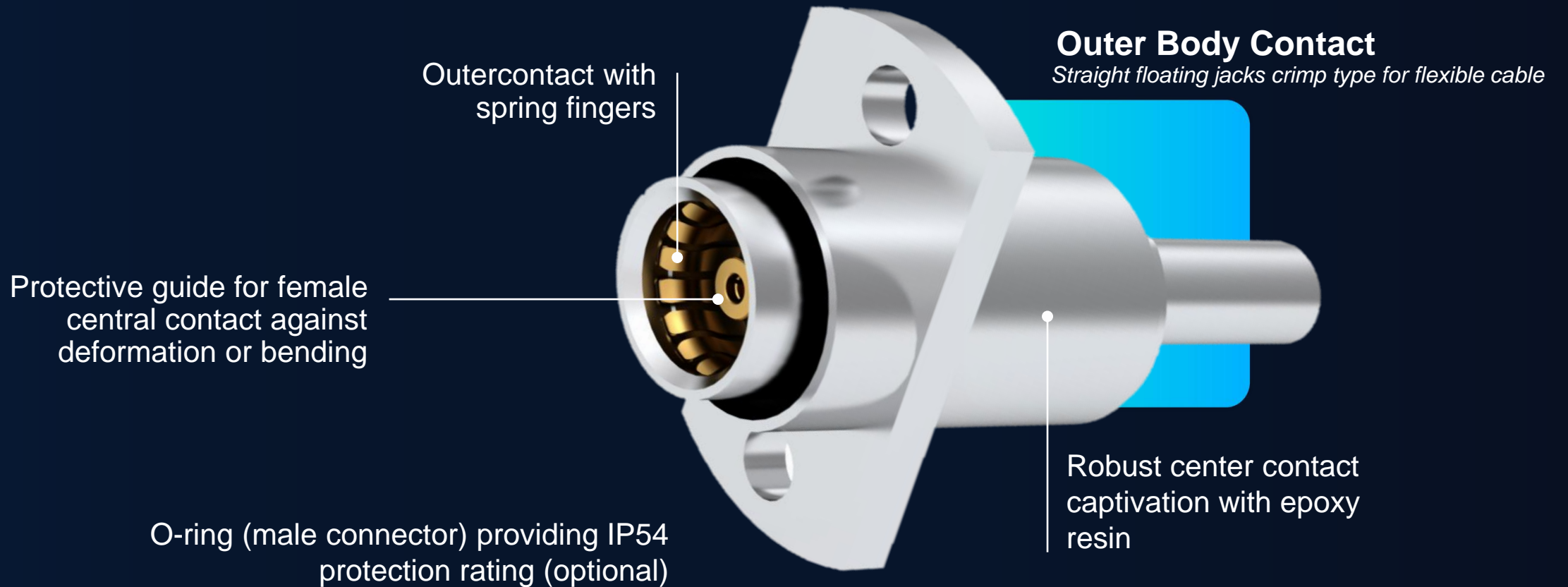
## SBMA

- 30% smaller than BMA (R108)



## PRODUCT DETAILS – MAIN FEATURES BMA (R128)

*Radiall designed a specific spring fingers outer contact on all BMA female connectors which provides improved performance and stability at high frequency up to 22 GHz.*



## PRODUCT DETAILS – MAIN FEATURES



### AVAILABLE IN 2 CONFIGURATIONS

Connectors with float mount provide greater misalignment tolerances

	Radial Misalignment	Axial Misalignment
<b>Rigid Mount</b>	$\pm 0.095$ mm (.0037")	0.38 mm (.015")
<b>Float Mount</b>	$\pm 0.5$ mm (.02")	> 1.5 mm (.06")

Float mount connectors are recommended for multiple interconnects. Contact Radiall for mounting tolerances.

## PRODUCT DETAILS – MAIN FEATURES

### Float Mount

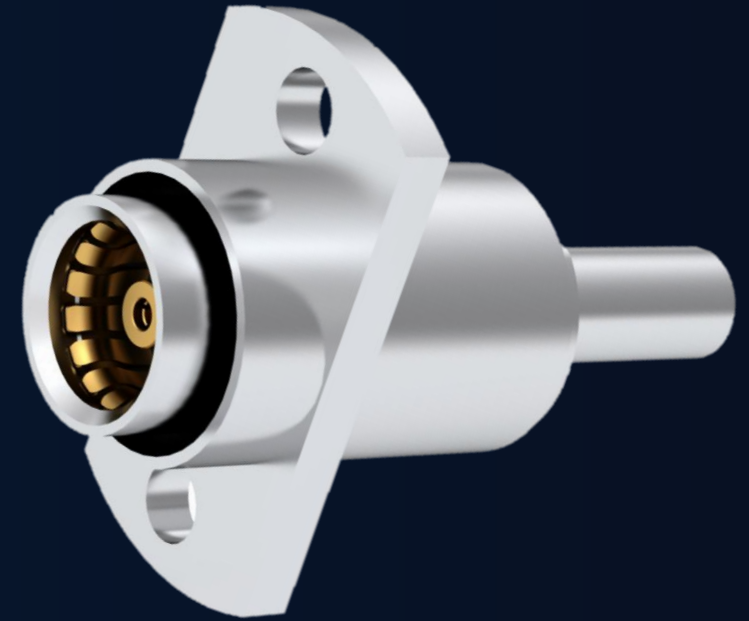
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Floating design using spring loaded female receptacle

**Float mount design** provides **good electrical connection** with as much as  $\pm 0.5$  mm radial misalignment between mating connectors

Typically for PCB and/or panel mount with large number of BMA ports

**Self-alignment system** thanks to the floating system



# PRODUCT DETAILS – AVAILABLE CONFIGURATIONS



Straight floating jacks crimp type for flexible cable



Straight floating jacks solder type for semi rigid cables



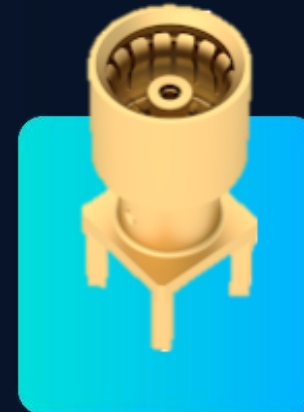
Straight contact size 8 for mil-std 38999 solder type



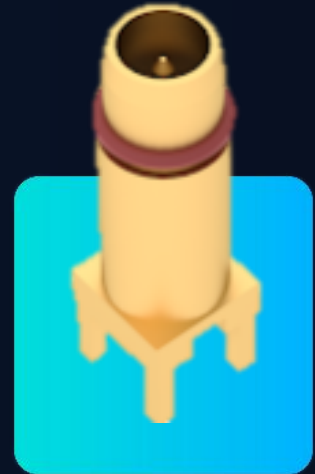
Straight bulkhead plugs, solder type for semi-rigid and flexible cables



Screw on hermetic receptacles with emi gasket



PCB female receptacles



PCB male receptacles

## PRODUCT DETAILS – CONFIGURATIONS

### BMA contacts for 38999 circular connectors

For RF or hybrid harnesses

#### Size #8 BMA contacts suitable for 38999 series I, II, IV

- DC-22 Ghz with SHF 3 & 5
- DC-10 GHz with RG142



Part number	Description
R128003000	non environmental pin contact for SHF3 cable
R128213711	non environmental socket contact for SHF3 cable
R128005201	environmental pin contact for SHF5 cable
R128215501	environmental socket contact for SHF5 cable
R128215701	non environmental socket contact for SHF5 cable
R128034021	environmental pin contact for 2.35/50D cable
R128235021	environmental socket contact 2.35/50D cable
R128036021	environmental pin contact 3/50D cable
R128053000	non environmental pin contact for .085 and SHF2.4 cable
R128294300	non environmental socket contact for .085 and SHF2.4 cable
R128056000	non environmental pin contact for .141 and SHF4.2 cable
R128296710	non environmental socket contact for .141 and SHF4.2 cable

## PRODUCT DETAILS – CONFIGURATIONS

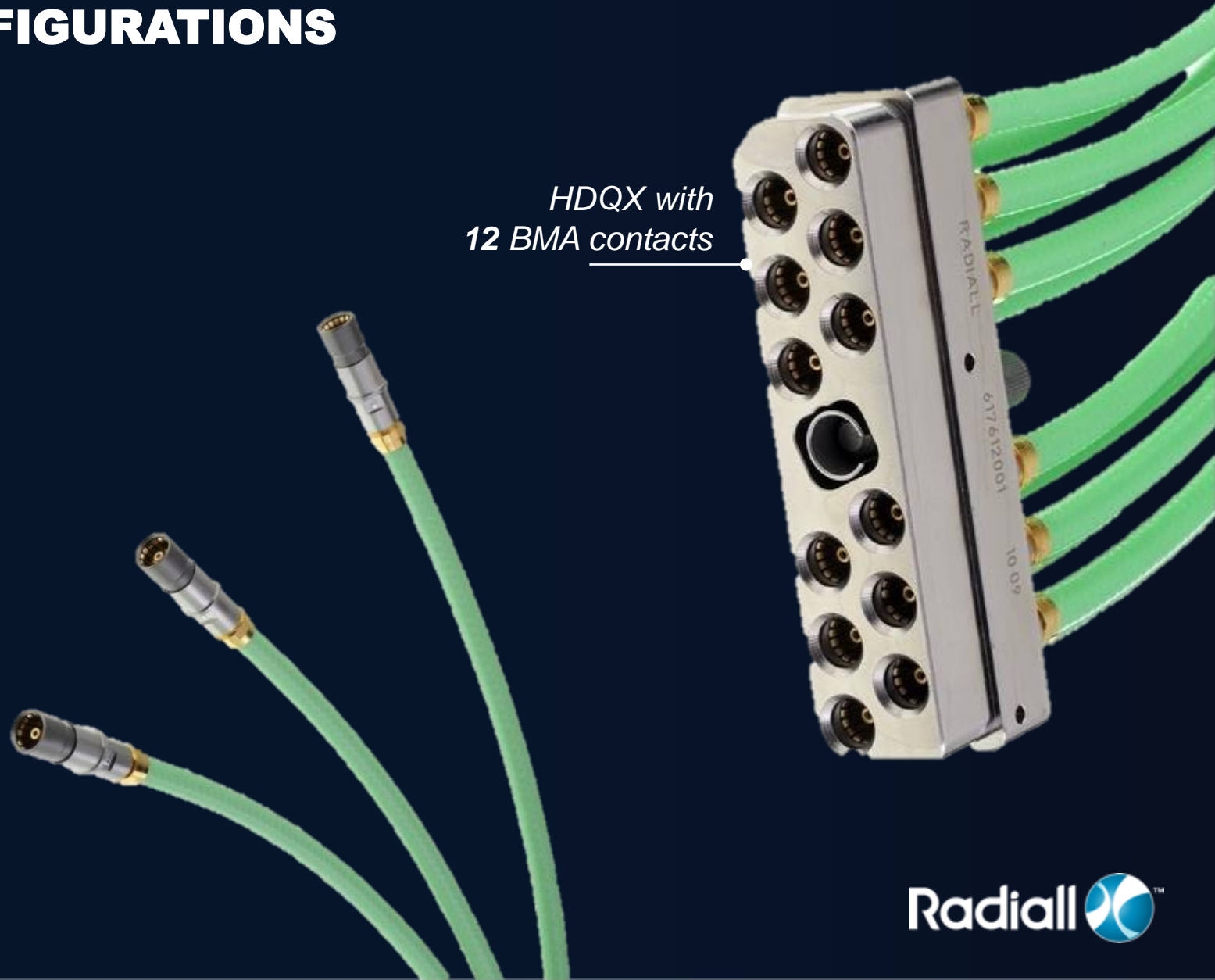
### BMA contacts for

Rack and Panel connectors type Arinc 600, EN3682, EPX®, HDQX for avionics systems

### Size #8 BMA floating contacts

Excellent performance and stability during vibration test

*HDQX with  
12 BMA contacts*



# PRODUCT DETAILS – CONFIGURATIONS

## BMA contacts for rectangular connectors

Part number	Description
R128005221	environmental pin contact for SHF5 cable for MPX/NSX series
R128005341	non environmental pin contact for SHF5 cable for MPX/NSX/EPXB series
R128005321	non environmental pin contact for RG142 cable for MPX/NSX/EPXB series
R128215521	environmental socket contact for SHF5 cable for MPX/NSX series
R128215711	non environmental socket contact for SHF5 cable for MPX/NSX/EPXB series
R128238021	non environmental socket contact for RG142 cable for MPX/NSX/EPXB series
R128053201	non environmental pin contact for .085 and SHF2,4 cable for MPX/NSX/EPXB series
R128294201	non environmental socket contact for .085 and SHF2,4 cable for MPX/NSX/EPXB series
R128213701	non environmental socket contact for SHF3 cable for MPX/NSX/EPXB series
R128503001	non environmental pc tail pin contact for EPXB series



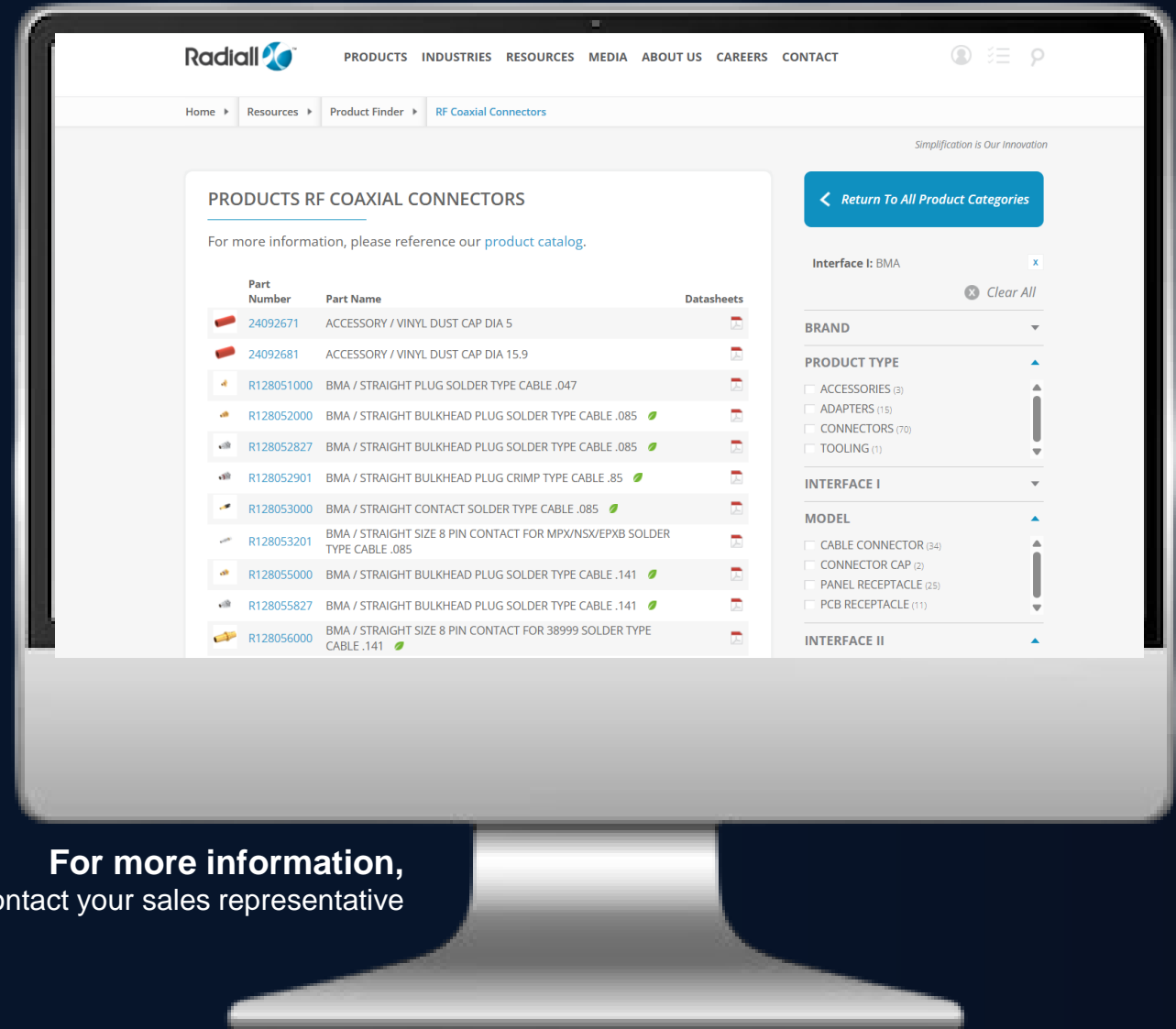
*EPXB2 with  
6 BMA contacts*

# MARKETING TOOLS



[Click here to access on our online tools](#)

Handout  
Product TDS



For more information,  
please contact your sales representative

## VIDEO PRESENTATION



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our VIDEO



# THANK YOU