

# Fakra PCB - 90° Male

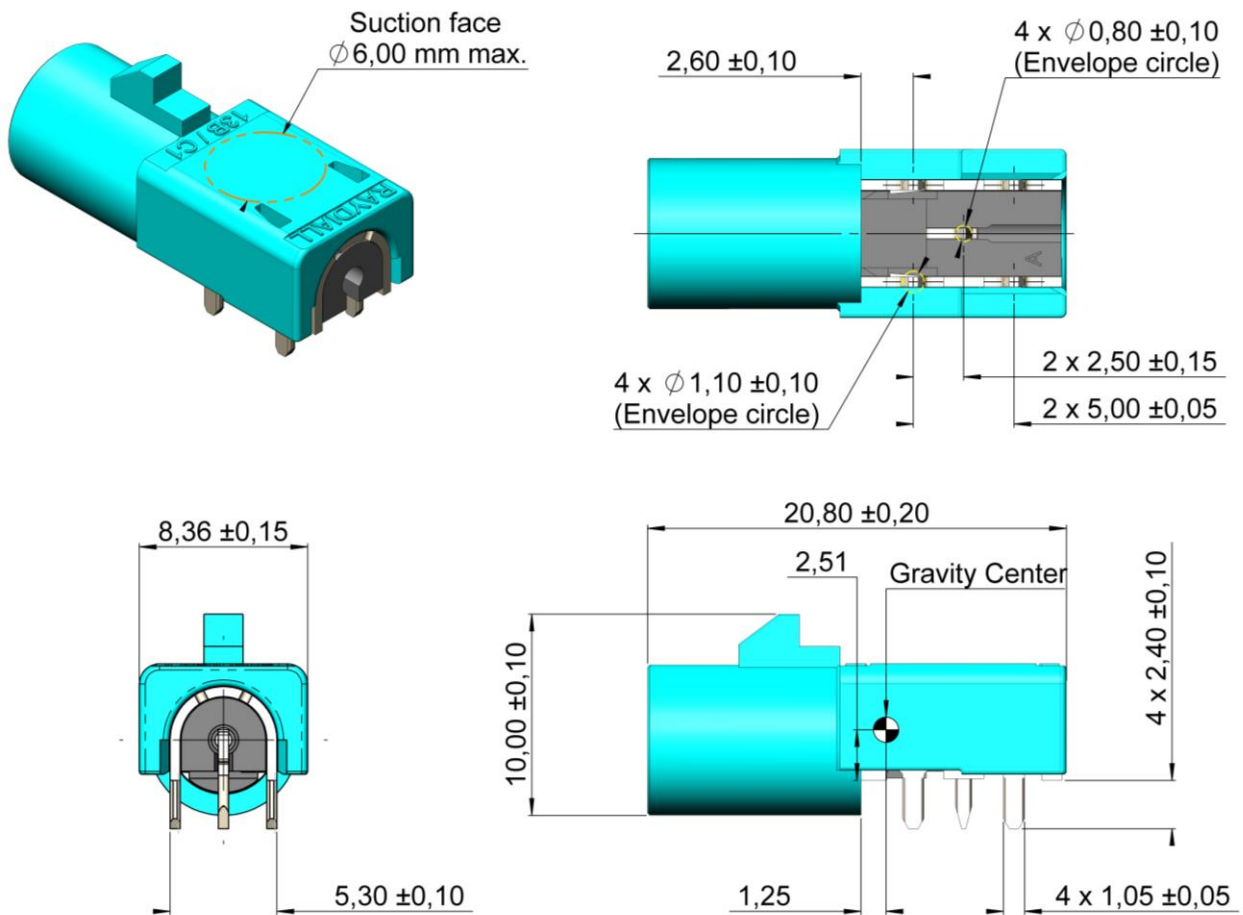
Process: Reflow



R197.166.\_28

TECHNICAL DATA SHEET

Rev	Date	Edited	Approved	Validated	Modification
1	06/09/2018	T. Mbuyi	Y.Gay	R.Chantre	Creation



All dimensions are in mm

Components	Materials	Plating
Body	Brass	Matt Tin 3 over Nickel 2
Center contact	Brass	Selective gold 0.15 over Nickel 2
Insulator	Polyamid GF30	Natural color
Housing	High temperature polymer GF30	See Codings

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## Interface

According to ISO 20860-1

## Application

This terminal has been qualified according USCAR-17 Rev.4 (March 2013) and USCAR-2 Rev.5 (November 2007).

## Electrical characteristics

Impedance	50 Ω
Frequency	0-3 GHz
VSWR	≤1.4 (45MHz to 2GHz) ≤1.5 (2GHz to 3GHz)
Voltage rating	335 Veff Maxi
Dielectric withstanding Voltage	1000 Veff maxi
Insulation resistance	1000 MΩ

## Mechanical characteristics

Center contact retention, axial force, mating end	≥10 N
Center contact retention, axial force, opposite end	≥10 N
Housing retention	≥110 N
Mating cycles	≥ 25

## Environmental

Operating temperature	-40 / +105°C
RoHS compliant	

**Component weight** 1,79 g

## Codings

To obtain the complete part number, please fill in the blank “\_” with the coding letter



**A**  
Black  
9005



**B**  
Crème White  
9001



**C**  
Blue  
5005



**D**  
Bordeaux  
4004



**E**  
Green  
6002



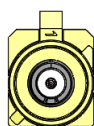
**F**  
Brown  
8011



**G**  
Grey  
7031



**H**  
Violet  
4003



**I**  
Beige  
1001



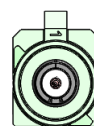
**K**  
Curry  
1027



**L**  
Carmin  
3002



**M**  
Pastel Orange  
2003



**N**  
Pastel Green  
6019



**Z**  
Water blue  
5021

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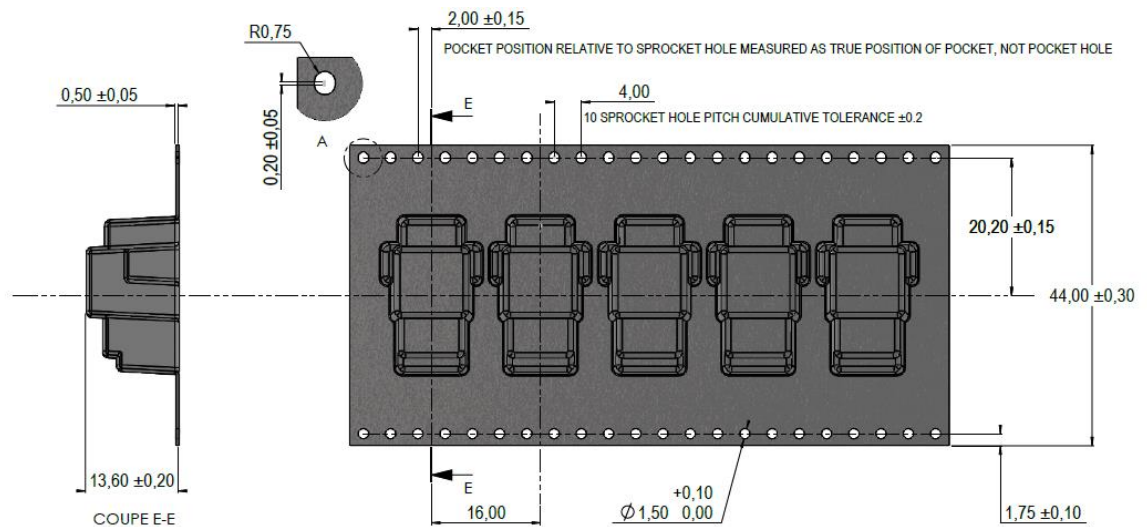
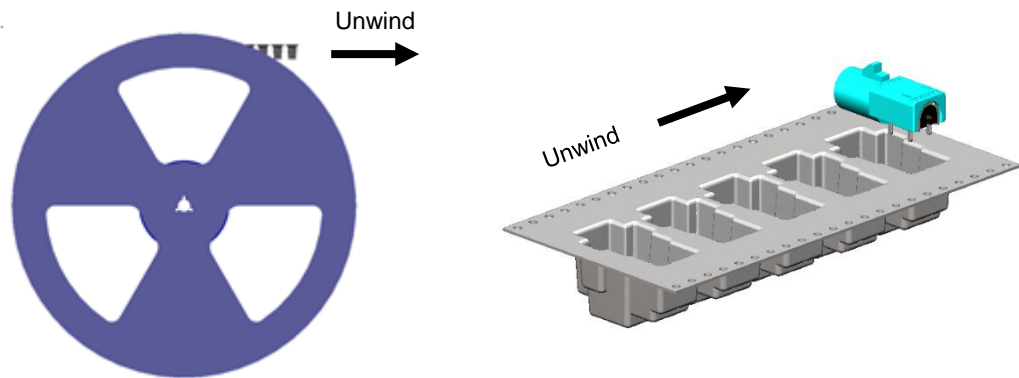
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TECHNICAL DATA SHEET

**Packaging** 4 plastic reels inside 1 cardboard box

**Primary packaging: plastic reel**

- Dimensions :  $\varnothing$  380 x 48mm
- Number of connectors per reel: 450
- Carrier tape description:
  - 44mm width, 16mm pitch.
  - Material: thermoplastic static dissipative. Cover tape material: Thermoplastic antistatic



**Secondary packaging: Cardboard box**

- Outside dimensions: 400 x 400 x 200 mm
- Number of reels per cardboard box: 4
- Number of connectors per cardboard box: 1800
- Weight: 7,4 kg



## Storage

The product must be used as soon as it is removed from the cells.

Do not leave the product in the open air.

Reels should be stored indoors, in his original unopened packaging, in a controlled climate environment not exceeding -20°C / +40°C and 60% Max. relative humidity.

Reels should be protected from direct sunlight and should be used on a "first-in, first-out" basis.

It is recommended that connector be used within 1 year from the date of manufacture when stored according to the recommended storage condition.

## PCB Cut out

- PCB Thickness: 1,6 mm.
- PCB recommended material: FR4 ( $\epsilon_r = 4.6$ ).
- 5 metalized holes.
- Solder paste has to be printed onto the land of solder and into holes to permit Pin In Hole Reflow.
- This layout is a recommendation for solderability.
- Design and performances of the PCB will depend on customers choices and RAYDIALL cannot be considered as responsible in case of bad performances.
- A numerical simulation of the PCB is recommended to optimize the RF performance in high frequency.

