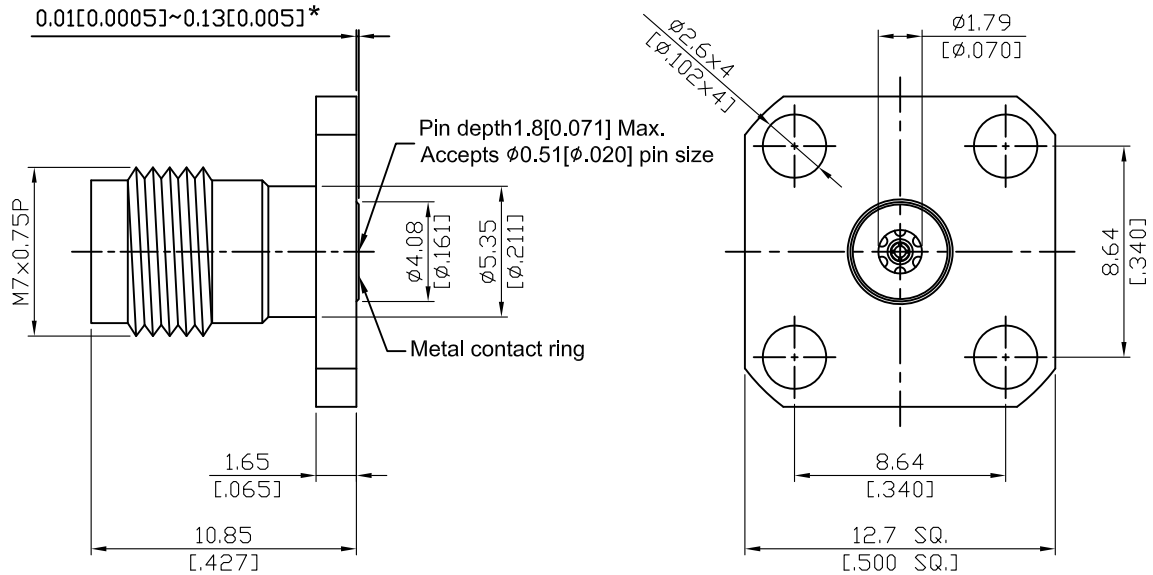


2.4-8F46C-EM20

2.4mm Field Replaceable Jack,
SQ 12.7mm (.500inch) 4 Hole Flange With Metal Ring,
Accepts $\phi 0.51\text{mm}$ (.020inch) Pin, 50GHz VSWR 1.18

50 Ω



*360° Raised Metal Contact Ring

| Parts | Material | Plating (Micro-inch) |
|--------------------|------------------|---|
| Body | Stainless Steel | Passivated |
| Insulator | PEI | |
| Contact Pin | Beryllium Copper | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |
| Metal Contact Ring | Beryllium Copper | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |

This part number complies with RoHS.

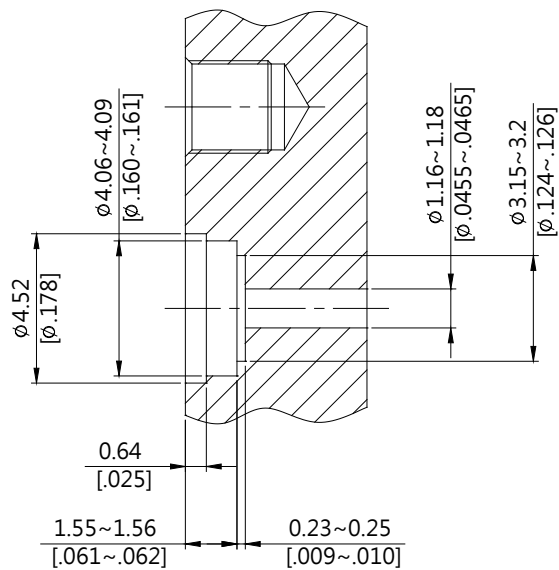
Notice: JYEBAO reserves the right to make modifications deemed appropriate.

| 2.4 | 2.4-8F46C-EM20 |
|--|----------------|
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Interface</div> MIL-STD-348B Mechanically compatible with 1.85 | |
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Electrical Data</div> Impedance 50Ω Frequency range DC to 50GHz VSWR ≤ 1.18 (DC to 50GHz) Insertion loss $\leq 0.05 \times \sqrt{f(\text{GHz})}$ dB Insulation resistance $\geq 5000\text{M}\Omega$ Contact resistance inner conductor $\leq 4\text{m}\Omega$ Contact resistance outer conductor $\leq 2.5\text{m}\Omega$ Dielectric withstanding voltage (sea level) 500V rms Working voltage (sea level) 150V rms RF leakage $\geq 100\text{dB}$ to 1GHz | |
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Mechanical Data</div> Recommended coupling nut torque 7.08 to 9.74 inch lbs Coupling proof Torque 15 inch lbs Contact captivation-axial ≥ 4.5 lbs Durability (mating) ≥ 500 | |
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Environmental Data</div> Temperature range -40°C to +165°C Thermal shock MIL-STD-202, Method 107, Condition B Moisture resistance MIL-STD-202, Method 106 Corrosion MIL-STD-202, Method 101, Condition B RoHS Compliant | |
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Accessories</div> Hermetic seal SEAL.02 Launch pin & Dielectric transition FR020-LAUNCH1; FR020-LAUNCH2 Tab pin & Dielectric transition FR020-TAB2; FR020-TAB3 Tab pin FR020-TAB1; FRPIN.02 | |

Notice: JYEBAO reserves the right to make modifications deemed appropriate.

Recommended Launch Hole Dimensions :

1. Using Hermetic seals



Hermetic seal P/N

SEAL.02

2. Using dielectric with Tab or Launch pin

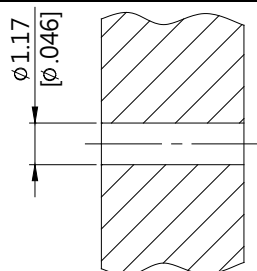


"A" = Substrate thickness

"B" = A + 1/2 Tab or Launch terminal

| Dielectric and Tab/Launch pin P/N | Recommended Launch hole dia. | Recommended Launch hole length |
|-----------------------------------|------------------------------|--------------------------------|
| FR020-LAUNCH1 | ϕ 1.63 (.064) | 4.75 (.187) |
| FR020-LAUNCH2 | ϕ 1.63 (.064) | 3.18 (.125) |
| FR020-TAB2 | ϕ 1.63 (.064) | 4.75 (.187) |
| FR020-TAB3 | ϕ 1.63 (.064) | 3.18 (.125) |

3. Using Tab pin



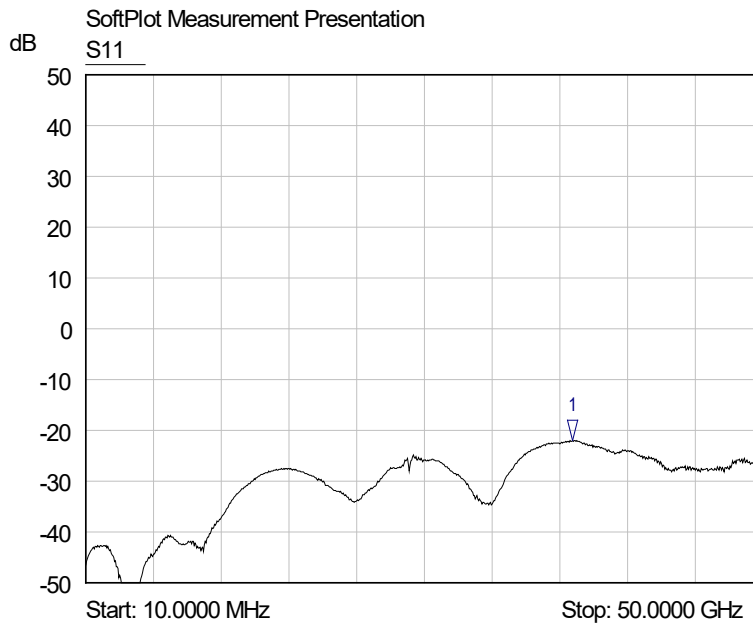
Tab pin P/N

FR020-TAB1

FRPIN.02

2.4-8F46C-EM20

S11



1 S11
▽ 35.9227 GHz
-21.96 dB