



VGRCB-9CF / VGFCB-9CF



The VGRCB-9CF provides 9 coaxial contacts for signals up to 18Ghz. All fixture cable connections to the VGFCB-9CF blocks are made through SMA cable contacts providing for a variety of available coaxial cables. VGRCB-9CF contacts are crimp or SMA with some resultant specification changes. Two precision alignment pins per block ensure proper alignment. Two shoulder mounting screws per VGRCB-9CF block allow the block to 'float' in the receiver. Blocks, contacts and cables are sold separately. Specify Crimp or SMA on Receiver Contacts.

Application Notes

Both the receiver and ITA adapters accept RG-142/U, 50Ω coax cable or miniature coax cable. The mated adapters have a frequency range from DC to 18 Ghz. When designing solutions using the VGR(F)CB-9 blocks, keep in mind the 'system losses' of the desired solution. The insertion loss of the contacts without cabling of the VGR(F)CB-9 are approximately 0.03(f(Ghz)). General-purpose RG-142B/U coax offers economical solutions from DC to 10Ghz (with 0.49 dB/ft loss at 10Ghz). The following table is for reference only.

335VDC

Contact Pair Specifications

Voltage Rating (dielectric breakdown)

Contact Resistance (Crimp) / (SMA) $2.0 \text{ m}\Omega$ / $4.0 \text{ m}\Omega$

Insulation Resistance (M Ω Min.) 5000

RF Leakage (dB Min.) Crimp or SMA -(60-F(Ghz))
Corona 70,000 ft (VRMS Min)(Crimp) / (SMA) 190 / 250

Impedance 50Ω

Frequencey Range DC to 18Ghz VSWR (Crimp) / (SMA) 1.15 + .01F(Ghz) /1.05 + .005F(Ghz)

Insertion Loss (Crimp) / (SMA) $0.03\sqrt{(f(Ghz))}/0.06\sqrt{(f(Ghz))}$

Durability 5,000 Cycles

Ordering Information:

Fixture Module: VGFCB-9C (Ref No. 1122)

Receiver Module:VGRCB-9C (Ref No. 1121) 50Ω blind mate jack contact:A32434 50Ω blind mate plug contact Crimp:A31897Fixture Contact Connection Style:SMA 50Ω blind mate plug contact SMA:A35764 50Ω blind mate jack contact – Crimp StyleA31898

Receiver Contact Connection Style: SMA Fixture SMA Cable – Unterminated at Opposite End: 50Ω RG-142B/U CRF-CA50RG142B/U-36

Cable Assemblies

Receiver Coax Contact Cable Assembly (Crimp)

50Ω RG-1474/U CR-CA50RG174-36

Receiver Side CR-CA50RG174-36 Accessories:

Fixture Side CF-CA50RG174-36 SMA Connector Torque Wrench A31887

For more information about VG Mass Interconnect products: Contact your Local Sales Representative at www.ect-cpg.com/principal-offices Visit ECT Online at www.ect-cpg.com/vg-mass-interconnect-products

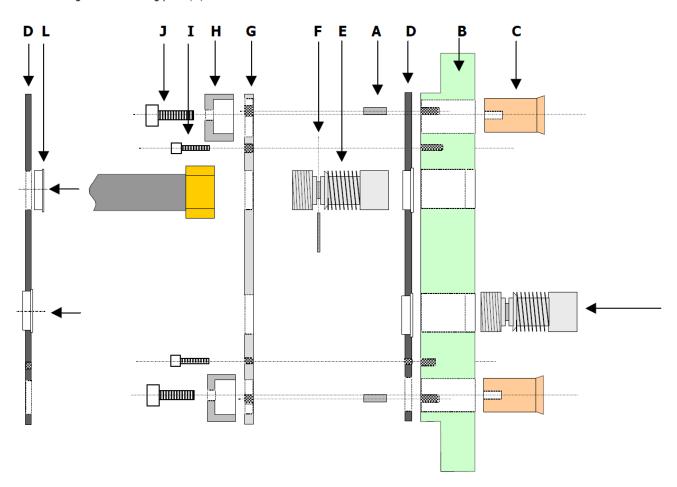


ASSEMBLY INSTRUCTIONS VGFCB-4C & VGFCB-9C

STEP

- 1. Using insertion tool A31888 (not shown), insert the flange (L) into each contact hole in the locking plate (D) where a high frequency contact will be installed. Correct assembly requires the flange be mounted flush to the locking plate.
- Insert the two Dowel Pins (A) into the VGFCB contact block (B). They are located in the center and bottom edges of the back side of the block.
- Insert female guide pin receptacle (C) into the two opposite corners of the block. Note these two holes do NOT have the counter bore noted in the other holes on the contact block.
- Insert the locking plate (D) over the dowel pins (A) mounted to the backside of the contact block.
- 5. From the front side of the VGFCB assembly, insert the coaxial contact (E) through the appropriate hole.
- Insert the locking ring (F) over the back of the VGFCB coaxial contact. This locking ring serves as the stop plate for the contact against the backing plate (G).

- Repeat steps 5 and 6 for all desired contacts.
- Placing the counterbored side of the backing plate towards the contact block (B), mount the backing plate (G) over the contacts from the back side, aligning so that the screw holes (I) are aligned in all surfaces
- Place cap screws in screw holes (I) and lightly secure with Allen wrench.
- Place female mounting caps (H) for male guide pin receptacle over the portion of the receptacle that protrudes forom the back of the backing plate.
- 11. Lightly tighten screws.
- Firmly tighten all screws/hardware. Do not over tighten.
- 13. Assemble all cable assemblies and attach from rear.



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