

VG Series Products

Mass Interconnect Technologies



VGRCB-4C

VGFCB-4C

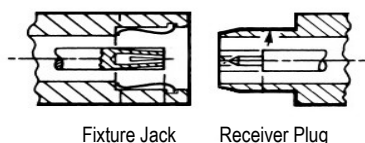
VGRCB-4C

VGFCB-4C

The VGRCB-4C provides 4 coaxial contacts for signals up to 18 Ghz. All cable connections to the VGRCB-4C blocks are made through SMA cable contacts providing for a variety of readily available coaxial cables. Two precision alignment pins per block ensure proper alignment. Two shoulder mounting screws per VGRCB-4C block allow the block to 'float' in the receiver. Blocks, contacts and cables are sold separately.

Contact Pair Specifications

Voltage Rating (dielectric breakdown).....	335 VDC
Contact Resistance	4.0 mΩ
Insulation Resistance (MΩ Min.).....	5000
RF Leakage (dB Min.)	-(90-F(Ghz))
Corona 70,000 ft (VRMS Min)	250
Impedance.....	50Ω
Frequency Range	DC to 18 Ghz
VSWR.....	1.05 + .005 F(Ghz)
Insertion Loss	0.06√(f(Ghz))
Durability	5,000 cycles



Fixture Jack

Receiver Plug

Application Notes

Both the receiver and ITA adapters will accept flexible, semi-rigid and rigid coax cables terminated with an industry standard SMA plug. The mated adapters have a frequency range from DC to 18 Ghz. When designing solutions using the VGR(F)CB-4C blocks, keep in mind the 'system' losses of the solution you are attempting to achieve. The insertion loss of the contacts without cabling of the VGR(F)CB-4C are approximately $0.06\sqrt{f(\text{Ghz})}$. General purpose RG-142B/U Coax offers economical solutions from DC to 10 Ghz (with 0.49 dB/ft loss at 10 Ghz). The following table is for reference only.

Attenuation @ Max Frequency -dB/100ft				
Cable Type	2Ghz	4Ghz	18Ghz	26Ghz
LMR400	6.0	8.8	21.1	26.5
LMR200	15.0	21.6	49.0	60.3
RG142	18.9	28.1	71.0	90.4
LMR100A	35.2	51.8	126.5	159.6
RG174	39.5	57.3	133.5	165.9
TFlex405	30.6	44.6	106.1	165.9

Ordering Information

Receiver Module	VGRCB-4C
50Ω blind mate plug contact.....	A32433
Receiver contact connection style.....	SMA

Identical Cable Assemblies for Fixture/Receiver

All cables SMA - Unterminated at Opposite End:	
50Ω RG-142B/U	CRF-CA50RG142B/U-36
50Ω LMR200	CRF-CA50LMR200/SMA-36
50Ω LMR400	CRF-CA50LMR400/SMA-36
50Ω Tflex405.....	CRF-CA50TFLEX405/SMA-36

Accessories

Installation Tool for ITA contact A32434	A35464
SMA Connector Torque Wrench	A31887

Fixture Module	VGFCB-4C
50Ω blind mate jack contact.....	A32434
Fixture contact connection style.....	SMA

Cable Contacts Only

SMA connector (Plug).....	A31889
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