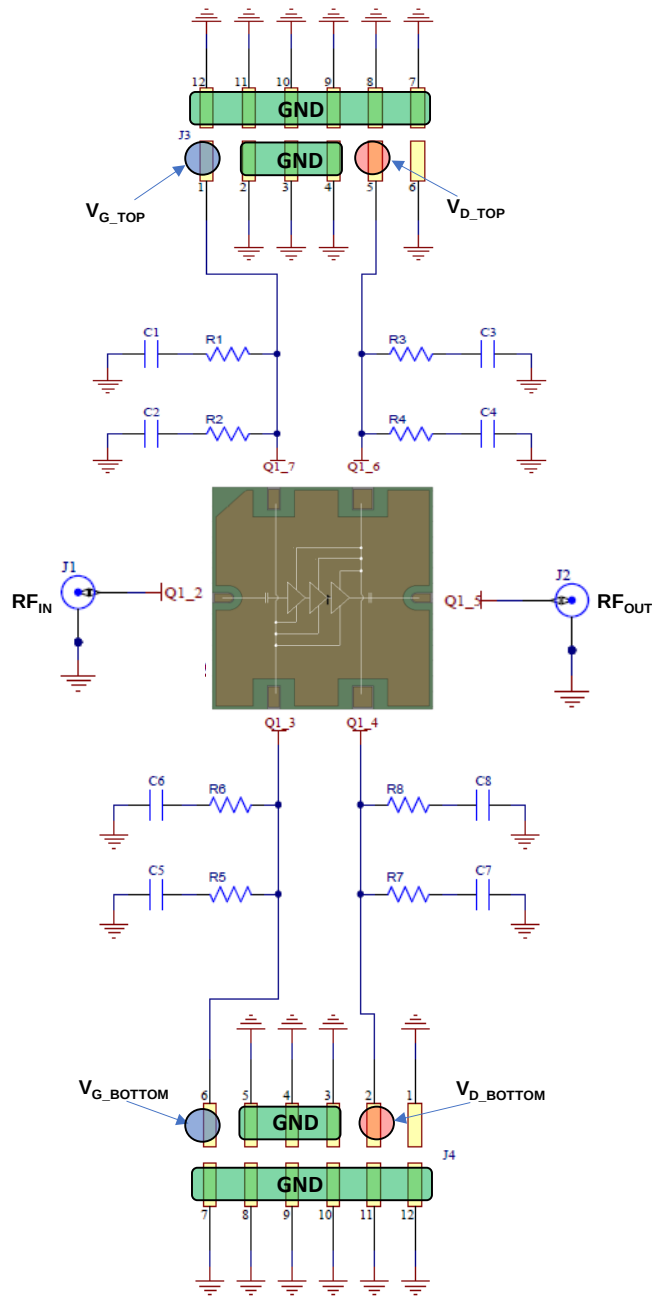


Applications Circuit (Pulsed V_D)



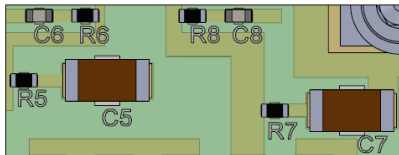
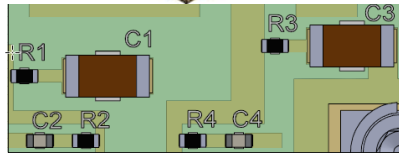
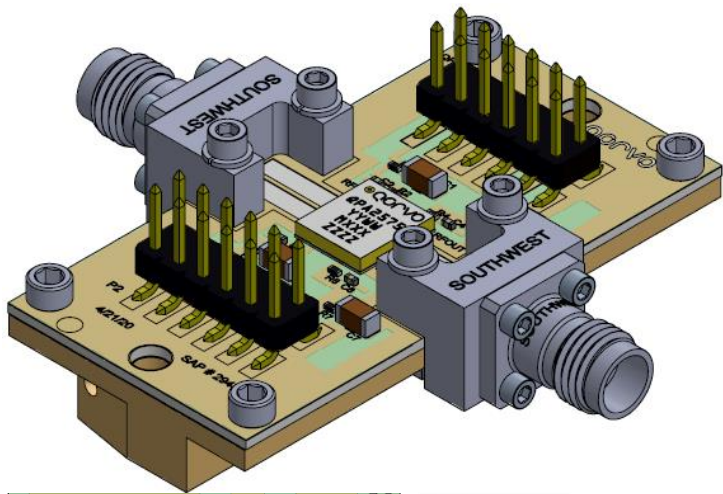
Bias-Up Procedure

1. Set I_D limit to 3.6 A, I_G limit to 20 mA
2. Set V_G to -1.5 V
4. Set V_D +6 V
5. Adjust V_G more positive until $I_{DQ} = 2.1$ A
6. Apply RF signal

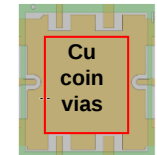
Bias-Down Procedure

1. Turn off RF signal
2. Reduce V_G to -1.5 V. Ensure $I_{DQ} \sim 0$ mA
3. Set V_D to 0 V
4. Turn off V_D supply
5. Turn off V_G supply

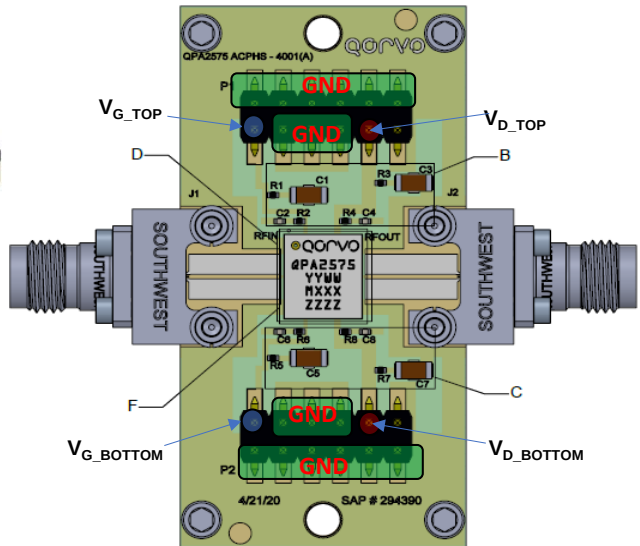
Application Evaluation Board



View B and C



View D and F



Material	Layer	Thickness	Dielectric Material	Type	Gerber
Surface Material	Top Overlay	0.0004in	Solder Resist	Legend	GTO
Copper	METAL_1_TOP	0.0028in		Solder Mask	GTS
Prepreg	CF-004	0.0050in	Rogers 6202	Dielectric	GTL
Prepreg	METAL_2_MID	0.0017in		Signal	G1
Core		0.0050in	370HR	Dielectric	
Copper	METAL_3_BOT	0.0017in	LAM 370HR	Dielectric	
Total thickness: 0.0376in					

PCB Layers

Bill of Materials

Reference Des.	Value	Description	Manuf.	Part Number
C1, C3, C5, C7	10 uF	CAP, 10uF, ±20%, 50V, X5R, 1206	Various	
C2, C4, C6, C8	0.1 uF	CAP, 0.01uF, ±10%, 50V, X7R, 0402	Various	
R1, R2, R4 – R6, R8	5.1 Ω	RES, 5.1 Ohm, 5%, 50V, 0402	Various	
R3, R7	0 Ω	RES, 0 Ohm, JMPR, 0402	Various	
H1	-	Header, connector, 2x6, 0.100", SMD		
J1, J2	-	Connector, Female, End Launch, 2.4mm	Southwest Microwave	
J3, J4	-	Connector, Header, 2x6, 0.100", SMD		
S1 – S4	-	Screw, cap, socket head, 2-56x1/8"		
PCB	-	Core FR4 0.027"thick, copper metal with immersion silver final plating. Total PCB thickness is 0.0376"	Rogers Corp.	Custom
Carrier	-	T-Carrier, Copper C110, 0.990 x 2.000 x 0.275"		Custom
Preform Solder	-	Preform, Solder, 0.984 x 1.994, 0.003"		
Solder	-	Paste, solder, Sn62Pb37, type 3		