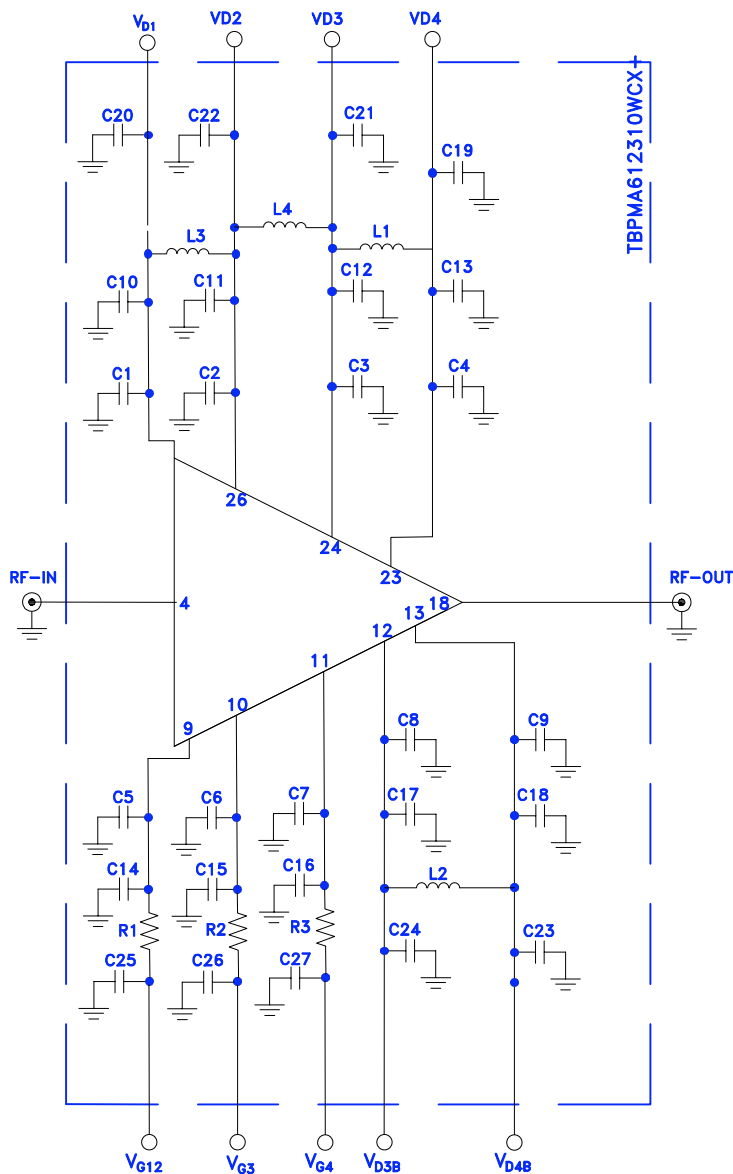
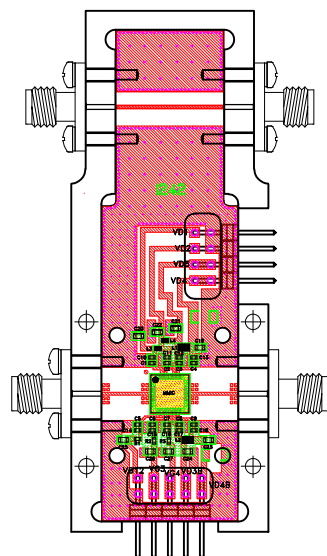


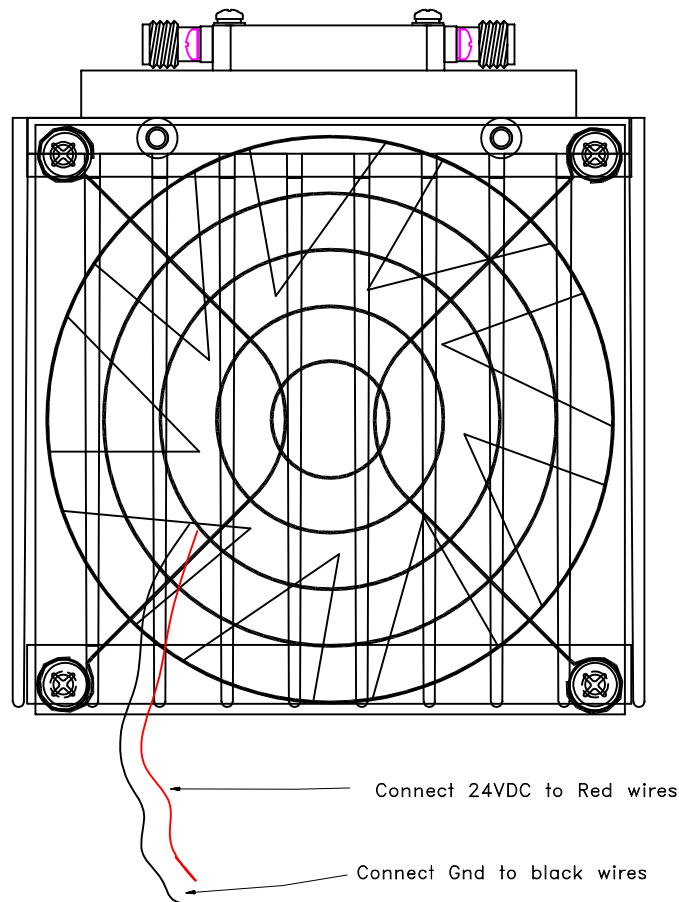
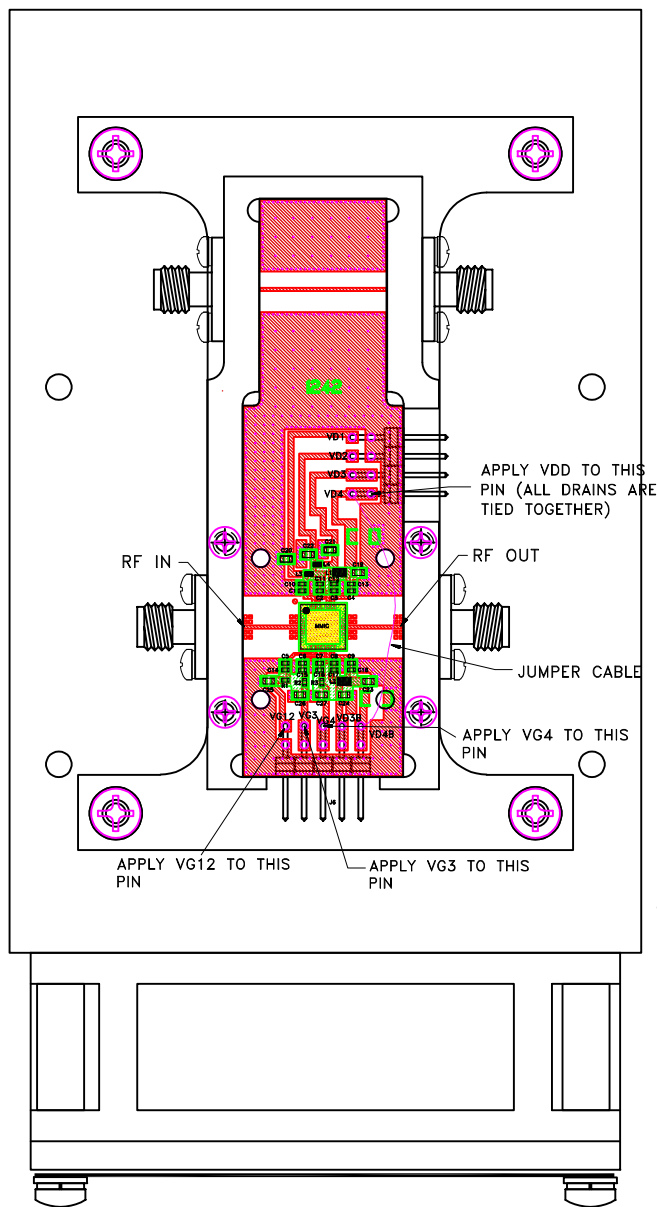
Evaluation Board and Circuit



Component	Size	Value	PartNumber	Manufacturer
R1	0402	24Ω	RK73H1ETTP24R0F	KOA SPEER ELECTRONICS
R2	0402	12Ω	RK73H1ETTP12R0F	KOA SPEER ELECTRONICS
R3	0402	0Ω	RK73Z1ETTP	KOA SPEER ELECTRONICS
C1–C9	0402	0.001μF	GRM1555C1H102JA01D	MURATA
C10–C18	0402	0.1μF	GRM155R71E104KE14D	MURATA
C19–C27	0603	1μF	06035C105KAT2A	AVX CORPORATION
L1,L2	0603	1000nH	0603AF–33NXJRW	COILCRAFT
L3,L4	0402	56nH	0402DF–560XJRW	COILCRAFT

Notes:

- 2.92mm Female Connectors.
- PCB Material: Roger R04003C or equivalent,
Dielectric constant=3.38, Thickness=0.0087±.001 inch



- Adjusting Drain Voltage: VDD; = 8 V
Please check true voltage at the package leads and adjust voltage from the power supply in order to compensate for possible voltage drop across DC cables and meters.

- BIAS ON SEQUENCE
- Before turning on VDD, apply -2 V on VG12 , VG3; , and VG4; pins.
- Turn on VDD to 8 V.

Since all VD1, VD2, VD3, and VD4 are connected with L1, L2, L3 and L4

- Increase VG12 until desired current 310 mA(=Idq12) is achieved
 - Increase VG3 until desired current 1150 mA(=Idq12+Idq3) is achieved
 - Increase VG4 until desired current 1500 mA(=Idq12+Idq3+Idq4) is achieved
 - Turn on RF.
- (Typical Gate voltages are between -0.9 and -0.7 V for VG12 ; and VG3; between - 1.3 and -1.0 V for VG4)

Note:

- All Drains are tied together thru L1, L4, L2,L3 and a jumper cable connecting top and bottom Drains.
- Gates VG12(Gate 1 & 2) are tied together and Gate VG3,VG4 are separate.
- Current handling of the jumper should be at least 2A.
- It is also recommended to DC probe the unit before turning it on. Just check the DC resistance on the gate side and make sure it is about 500 KΩ
- It is recommended to connect all grounds(2grounds for Drain & 1grounds for gate) to the fixture, with a thick enough wire that can handle at least 4A. Pic for reference



- BIAS OFF SEQUENCE:
- Turn off RF.
 - Decrease VG4; down to -2 V.
 - Decrease VG3; down to -2 V.
 - Decrease VG12; to -2 V.
 - Turn off VDD;.

Mini-Circuits

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SIZE	CODE IDENT	DRAWING NO:	REV:
A	15542	TBPMMA612310WCX-20+	1

FILE: WTBPMA6123310WCX-20+	SCALE: 4:1	SHEET: 2 OF 2
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