

TM5054

DC - 30 GHz 0.5 Watt Power Amplifier

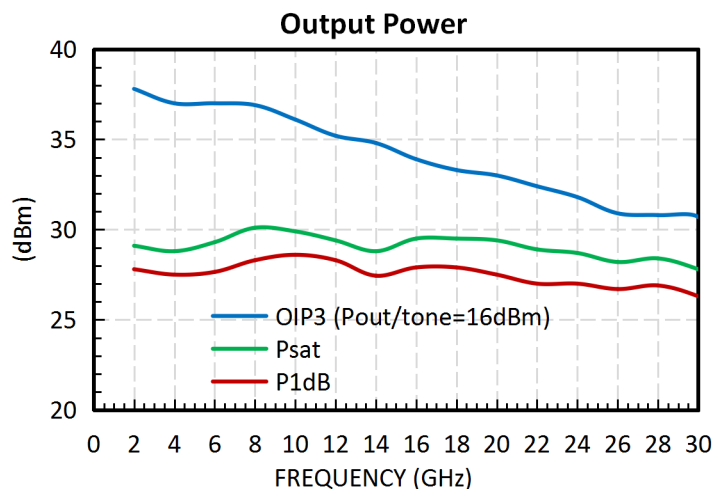
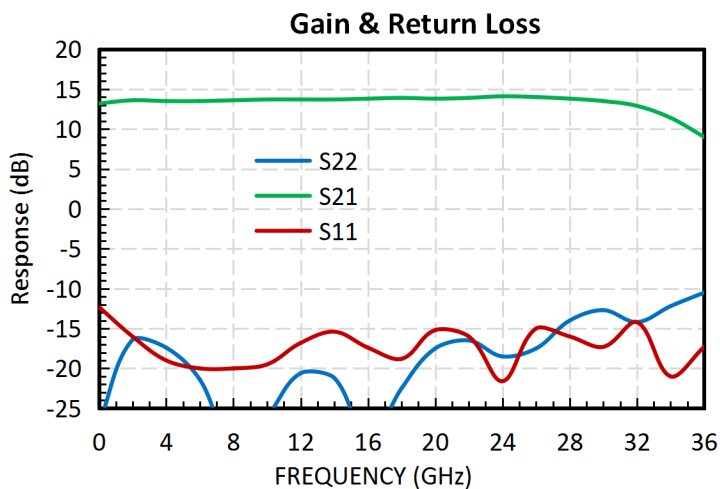


Absolute Maximum Ratings

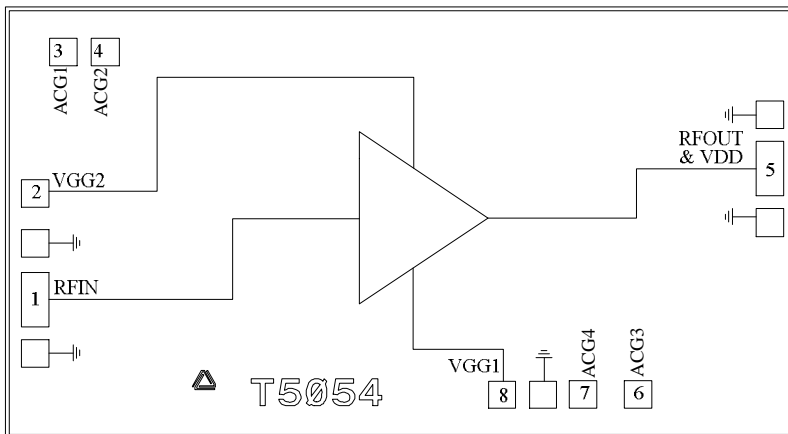
Parameter	Rating
Storage Temperature	-65 to 150 °C
Operating Temperature	-55 to 85 °C
Drain Voltage	+12 V
Gate Voltage VGG1	-3 to 0 V
Gate Voltage VGG2	VDD-8 to VDD-4
Channel Temperature	175 °C
Thermal Resistance (Channel to die bottom)	22 °C/W

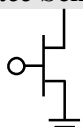
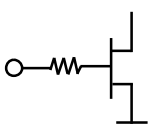
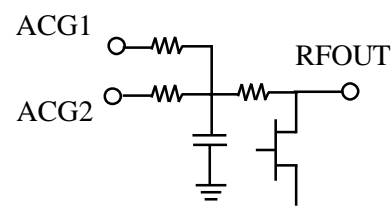
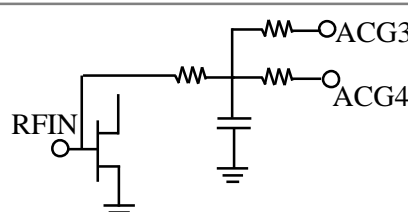
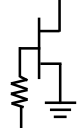
Recommended Operating Conditions

Parameter	Min	Typ	Max	Units
VDD		10		V
IDD		250		mA
VGG2		3.5		V

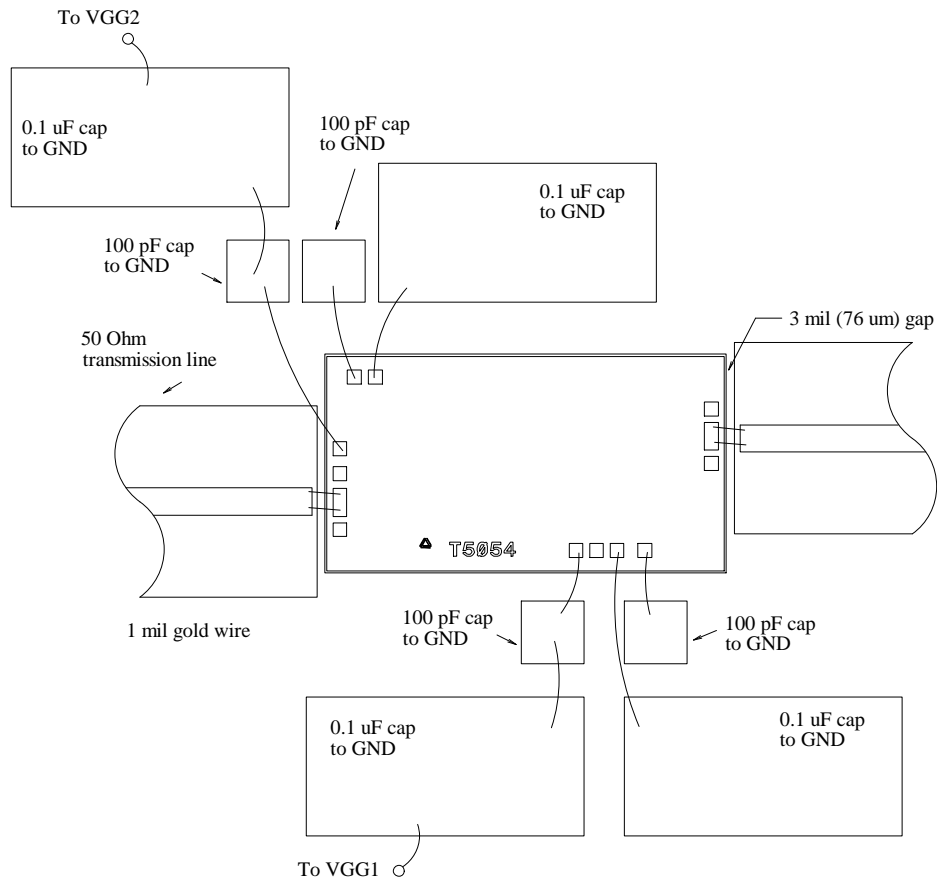


Pin Description



Pad	Function	Description	Interface Schematic
1	RFIN	50 Ohm matched and DC coupled input	
2	VGG2	Gate control 2 for amplifier. Recommended voltage is 3.5V	
3, 4	ACG1, ACG2	Low frequency AC ground termination. Attach bypass capacitor per application circuit.	
5	RFOUT & VDD	50 Ohm matched output and supply voltage. External bias-T required per application circuit.	
6, 7	ACG3, ACG4	Low frequency AC ground termination. Attach bypass capacitor per application circuit.	
8	VGG1	Gate control 1 for amplifier. Adjust this voltage for the desired IDD.	

Assembly Diagram



Application Circuit

