

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTICS	SYMBOL	UNIT	RATINGS
DRAIN SUPPLY VOLTAGE	VDD	V	10
GATE SUPPLY VOLTAGE	VGG	V	-10
INPUT POWER	Pin	dBm	20
POWER DISSIPATION	PT	W	14
FLANGE TEMPERATURE	Tf	°C	-60 to +100
STORAGE TEMPERATURE	Tstg	°C	-60 to +175

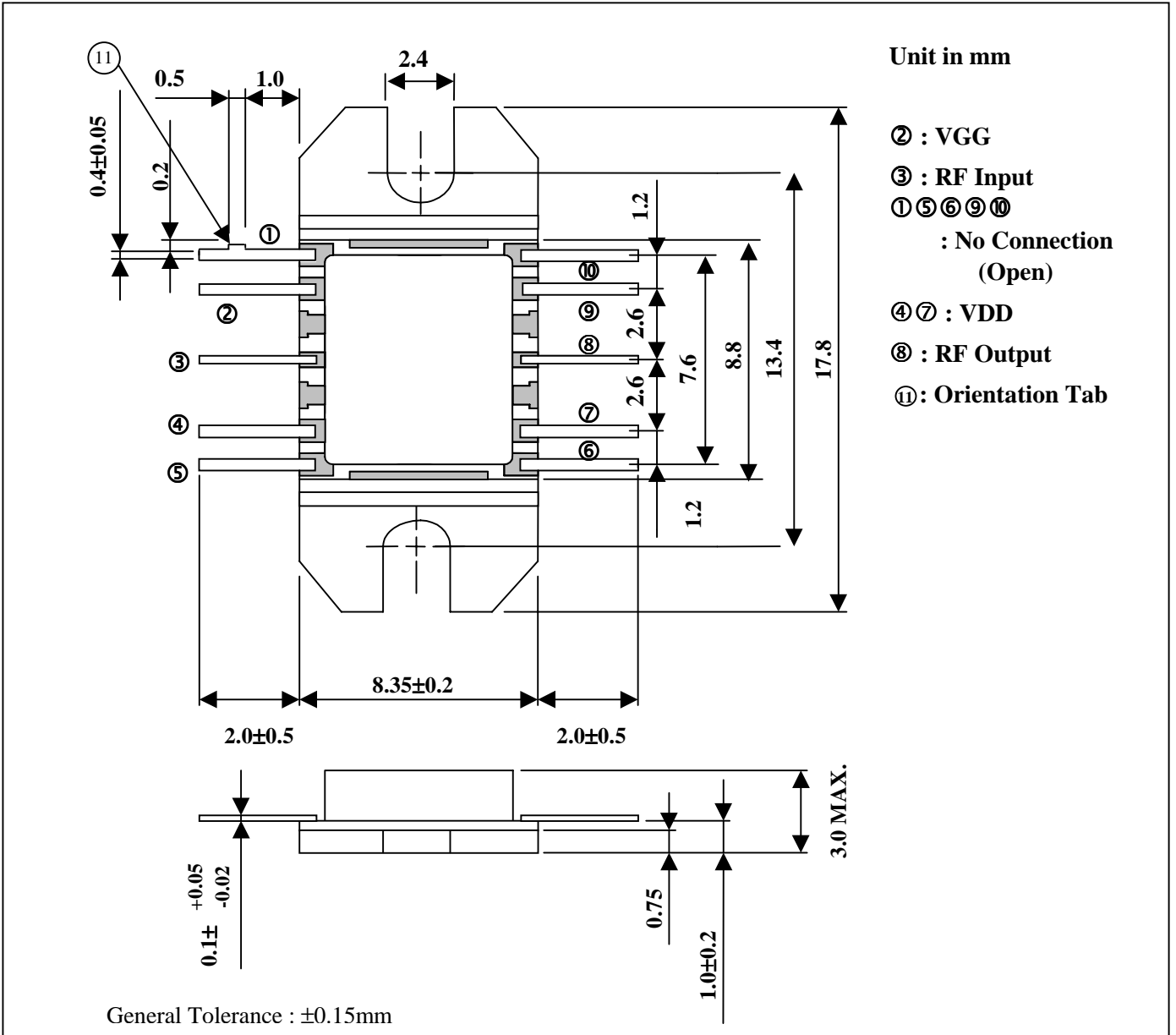
RF PERFORMANCE SPECIFICATIONS (Ta=25°C)

CHARACTERISTICS	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Operating Frequency	f		GHz	14.0	–	14.5
Linear Gain	GL	Pin=-10.5dBm	dB	27.0	28.0	–
Saturated Power	Psat	Pin=+10.5dBm	dBm	31.3	31.8	–
Drain Current	IDD	Pin=+10.5dBm	A	–	0.80	0.95

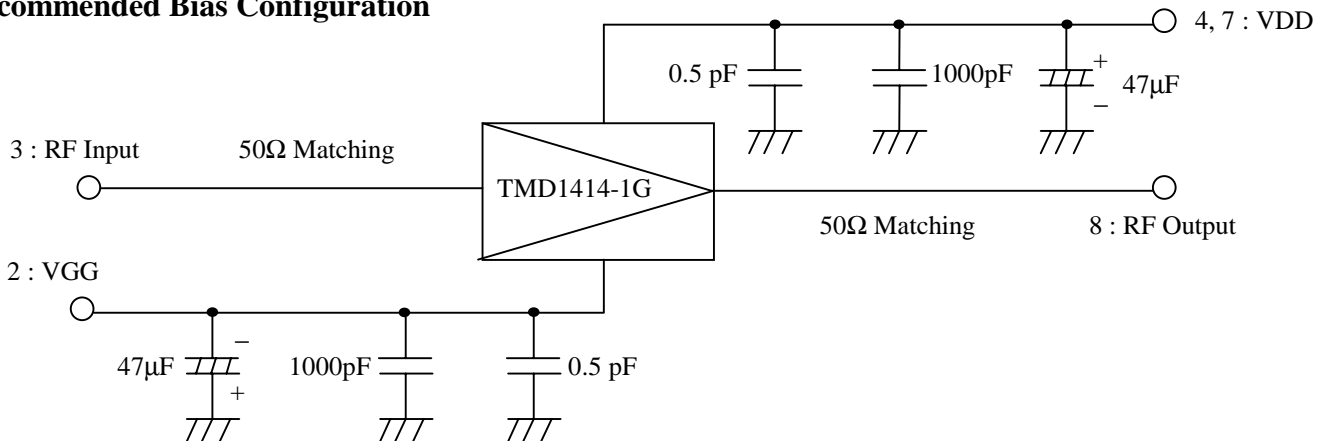
VDD=7V, VGG= -4.0/ -4.5/ -5.0V

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Package Outline (2-9E1K)

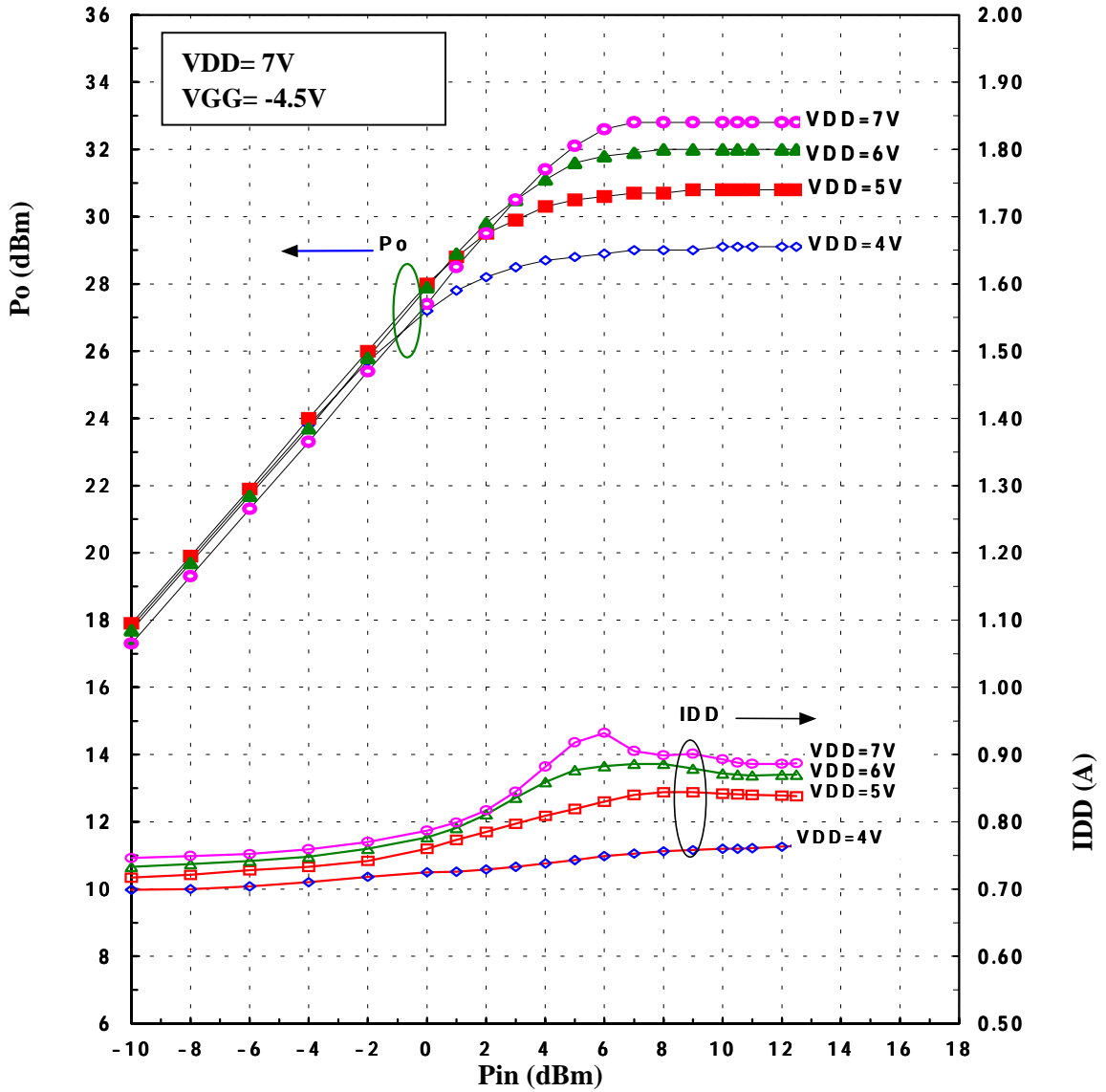


Recommended Bias Configuration

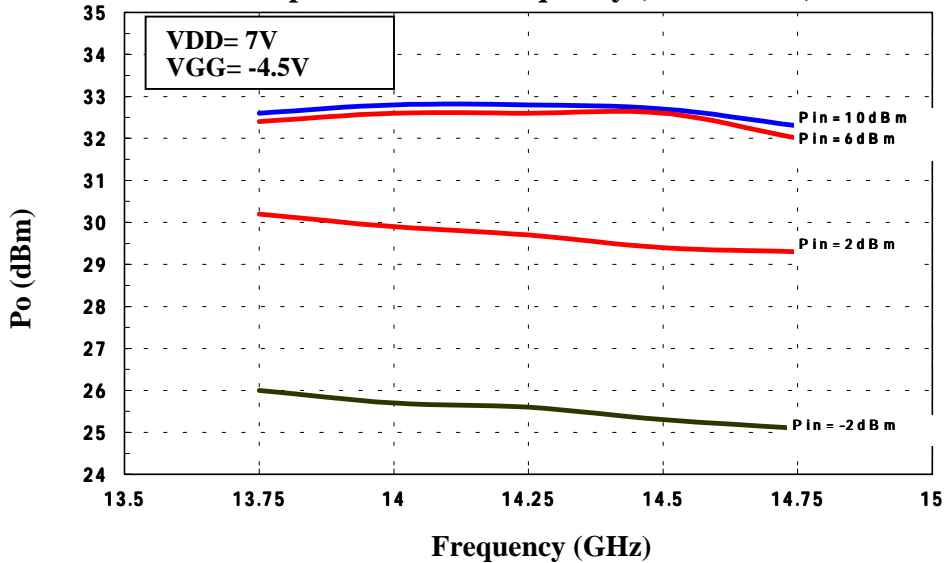


RF PERFORMANCES

Output Power vs. Input Power ($T_a=25\pm 5^\circ\text{C}$)

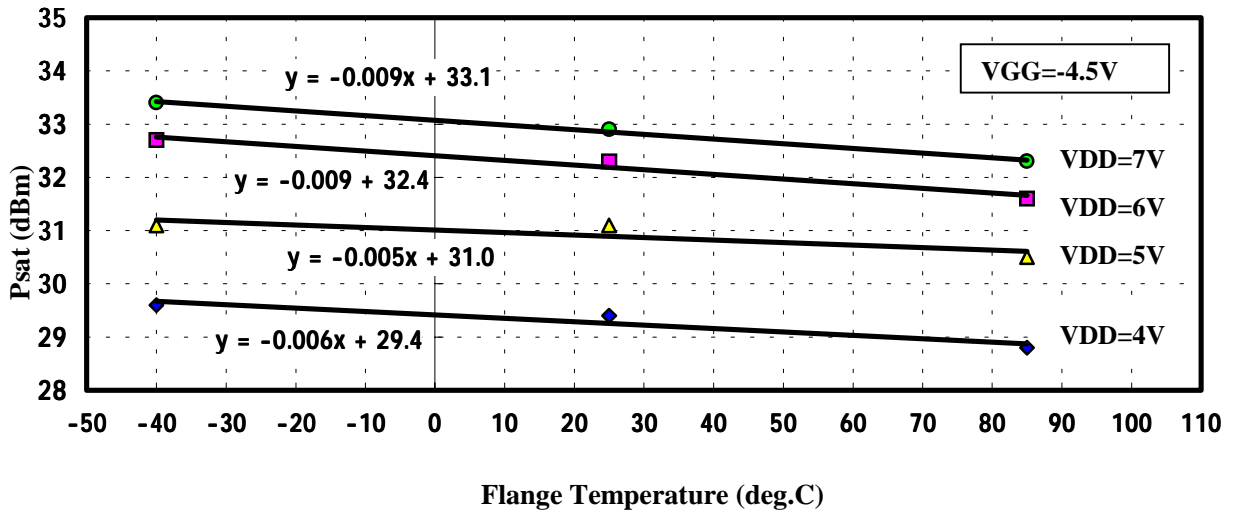


Output Power vs. Frequency ($T_a=25\pm 5^\circ\text{C}$)

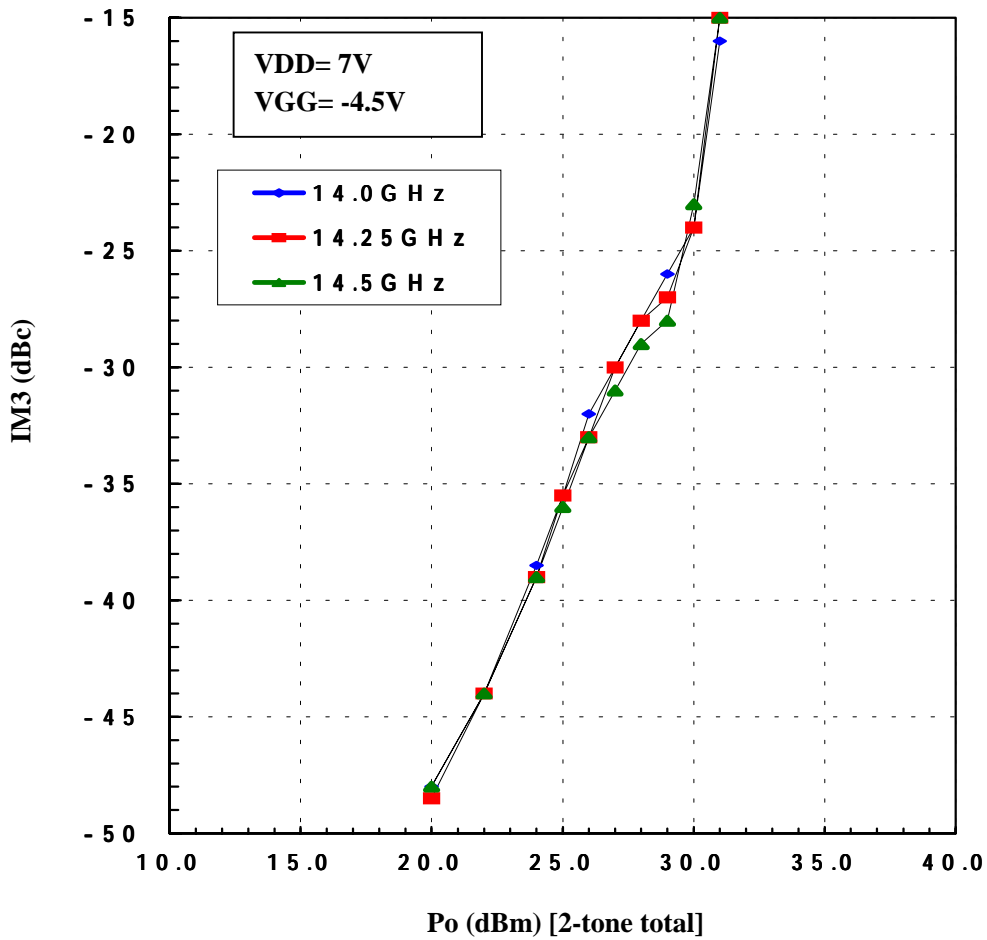


RF PERFORMANCES

Temperature Dependence (Psat@Pin=+10.5dBm)



IM3 vs. Output Power (Ta=25±5°C)



RF PERFORMANCES

TMD1414-1G S-PARAMETERS

VDD= 7V, VGG= -4.5V, Ta=25±5°C

f (GHz)	S11		S21		S12		S22	
	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG
13.2	0.60	-104	18.5	17	0.005	-169	0.59	-80
13.4	0.58	-112	21.2	-15	0.005	179	0.60	-86
13.6	0.54	-123	23.3	-48	0.004	166	0.59	-95
13.8	0.49	-136	24.6	-81	0.004	154	0.55	-104
14.0	0.41	-150	25.0	-114	0.004	144	0.48	-113
14.2	0.32	-165	24.8	-147	0.004	132	0.40	-120
14.4	0.21	178	24.4	-179	0.003	125	0.32	-125
14.6	0.10	155	23.9	149	0.003	119	0.25	-123
14.8	0.03	32	23.7	118	0.003	122	0.20	-113
15.0	0.14	-28	23.8	85	0.002	125	0.19	-97