

RF Performance Specifications ($T_a = 25^\circ\text{C}$)

Characteristic	Symbol	Condition	Unit	Min.	Typ.	Max.
Output Power at 1dB Compression Point	$P_{1\text{dB}}$	$V_{\text{DS}} = 9\text{V}$ $f = 10.7 \sim 11.7 \text{ GHz}$	dBm	41.0	42.0	–
Power Gain at 1dB Compression Point	$G_{1\text{dB}}$		dB	6.0	7.0	–
Drain Current	I_{DS1}		A	–	4.5	5.5
3rd Order Intermodulation Distortion	IM_3	Note 1	dBc	-42	-45	–
Drain Current	I_{DS2}		A	–	4.5	5.5

Note 1: 2-tone Test Pout, Po = 30 dBm Single Carrier Level.

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Characteristic	Symbol	Condition	Unit	Min.	Typ.	Max.
Transconductance	gm	$V_{\text{DS}} = 3\text{V}$ $I_{\text{DS}} = 4.8\text{A}$	mS	–	3000	–
Pinch-off Voltage	V_{GSoff}	$V_{\text{DS}} = 3\text{V}$ $I_{\text{DS}} = 145 \text{ mA}$	V	-1.5	-3.0	-4.5
Saturated Drain Current	I_{DSS}	$V_{\text{DS}} = 3\text{V}$ $V_{\text{GS}} = 0\text{V}$	A	–	10.0	11.5
Gate-Source Breakdown Voltage	V_{GSO}	$I_{\text{GS}} = -145 \mu\text{A}$	V	-5	–	–
Thermal Resistance	$R_{\text{th (c-c)}}$	Channel to Case	$^\circ\text{C/W}$	–	2.0	2.5

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