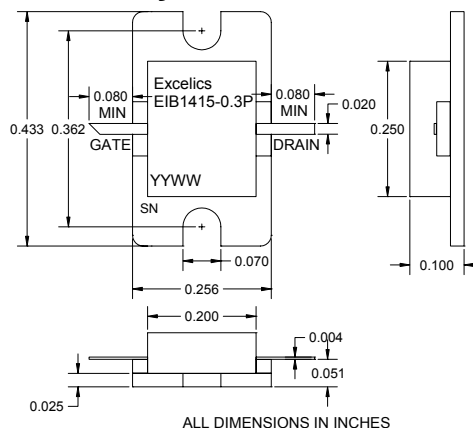


FEATURES

- 14.0– 14.5GHz Bandwidth
- Input/Output Impedance Matched to 50 Ohms
- +26.0 dBm Output Power at 1dB Compression
- 8.0 dB Power Gain at 1dB Compression
- 32% Power Added Efficiency
- Non - Hermetic Metal Flange Package



ELECTRICAL CHARACTERISTICS (T_a = 25°C)



Caution! ESD sensitive device.

SYMBOL	PARAMETERS/TEST CONDITIONS ¹	MIN	TYP	MAX	UNITS
P_{1dB}	Output Power at 1dB Compression V _{DS} = 8 V, I _{DSQ} ≈ 120mA f = 14.0-14.5GHz	24.0	26.0		dBm
G_{1dB}	Gain at 1dB Compression V _{DS} = 8 V, I _{DSQ} ≈ 120mA f = 14.0-14.5GHz	7.0	8.0		dB
ΔG	Gain Flatness V _{DS} = 8 V, I _{DSQ} ≈ 120mA f = 14.0-14.5GHz			±0.6	dB
PAE	Power Added Efficiency at 1dB Compression V _{DS} = 8 V, I _{DSQ} ≈ 120mA f = 14.0-14.5GHz		32		%
I_{d1dB}	Drain Current at 1dB Compression f = 14.0-14.5GHz		130	150	mA
IM3	Output 3rd Order Intermodulation Distortion Δf=10MHz 2-Tone Test. P _{out} =14.0 dBm S.C.L V _{ds} = 8 V, I _{DSQ} ≈ 65% I _{DSS} f = 14.5GHz	-43	-46		dBc
I_{DSS}	Saturated Drain Current V _{DS} = 3 V, V _{GS} = 0 V		210	300	mA
V_P	Pinch-off Voltage V _{DS} = 3 V, I _{DS} = 2.0 mA		-2.0	-3.5	V
R_{TH}	Thermal Resistance ³		55	60	°C/W

Note: 1) Tested with 200 Ohm gate resistor.

2) S.C.L. = Single Carrier Level.

3) Overall R_{th} depends on case mounting.

ABSOLUTE MAXIMUM RATING^{1,2}

SYMBOLS	PARAMETERS	ABSOLUTE ¹	CONTINUOUS ²
V_{ds}	Drain-Source Voltage	12	8V
V_{gs}	Gate-Source Voltage	-5	-4V
I_{gsf}	Forward Gate Current	3.6mA	1.2mA
I_{gsr}	Reverse Gate Current	-0.6mA	-0.2mA
P_{in}	Input Power	24.0dBm	@ 3dB Compression
T_{ch}	Channel Temperature	175 °C	175 °C
T_{stg}	Storage Temperature	-65 to +175 °C	-65 to +175 °C
P_t	Total Power Dissipation	2.5W	2.5W

Note: 1. Exceeding any of the above ratings may result in permanent damage.

2. Exceeding any of the above ratings may reduce MTTF below design goals.

Specifications are subject to change without notice.

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