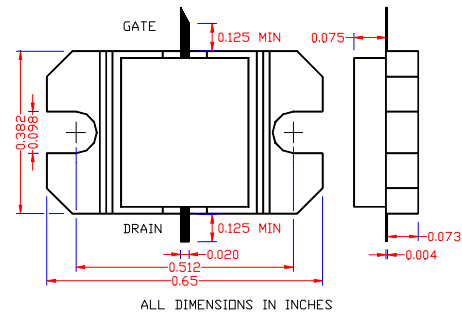


Not recommended for new designs. Contact factory. Effective 03/2003
13.0-14.5GHz, 2W Internally Matched Power FET

- 13.0-14.5GHz BANDWIDTH AND INPUT/OUTPUT IMPEDANCE MATCHED TO 50 OHM
- FEATURES HIGH PAE(30% TYPICAL)
- 33.0dBm TYPICAL P_{1dB} OUTPUT POWER
- 9dB TYPICAL G_{1dB} POWER GAIN
- NON-HERMETIC METAL FLANGE PACKAGE

ELECTRICAL CHARACTERISTICS (T_a = 25 °C)



SYMBOLS	PARAMETERS/TEST CONDITIONS	EIA1314A-2P						UNIT
		MIN	TYP	MAX				
P_{1dB}	Output Power at 1dB Compression f=13.0-14.5GHz V _{ds} =8V, I _{dq} =0.5 I _{dss}	32.5	33.0					dBm
G_{1dB}	Gain at 1dB Compression f=13.0-14.5GHz V _{ds} =8V, I _{dq} =0.5 I _{dss}	8	9					dB
PAE	Power Added Efficiency at 1dB compression f=13.0-14.5GHz V _{ds} =8V, I _{dq} =0.5 I _{dss}		30					%
I_{d1dB}	Drain Current at 1dB Compression		880					mA
IP₃	Output 3 rd Order Intercept Point f=13.0-14.5GHz V _{ds} =8V, I _{dq} =0.5 I _{dss}		40					dBm
I_{dss}	Saturated Drain Current V _{ds} =3V, V _{gs} =0V	1100	1440	1700				mA
G_m	Transconductance V _{ds} =3V, V _{gs} =0V		1500					mS
V_p	Pinch-off Voltage V _{ds} =3V, I _{ds} =12mA		-1.0	-2.5				V
BV_{gd}	Drain Breakdown Voltage I _{gd} =4.8mA	-13	-15					V
R_{th}	Thermal Resistance (Au-Sn Eutectic Attach)		8					°C/W

MAXIMUM RATINGS AT 25°C

SYMBOLS	PARAMETERS	ABSOLUTE ¹	CONTINUOUS ²
V_{ds}	Drain-Source Voltage	12V	8V
V_{gs}	Gate-Source Voltage	-8V	-3V
I_{ds}	Drain Current	I _{dss}	I _{dss}
I_{gsf}	Forward Gate Current	180mA	30mA
P_{in}	Input Power	32dBm	@ 3dB Compression
T_{ch}	Channel Temperature	175°C	150°C
T_{stg}	Storage Temperature	-65/175°C	-65/150°C
P_t	Total Power Dissipation	17W	14.2W

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.