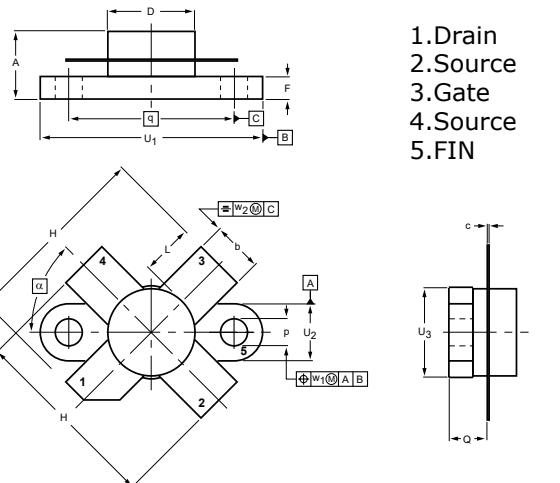


DESCRIPTION

Silicon N-channel enhancement mode vertical D-MOS transistor is designed for broadband HF and VHF applications.

FEATURES

- Output Power: 30 W
- Power Gain: 18 dB Typ@30M, 50V
- Efficiency: 40% Typ@30M, 50V

**DIMENSIONS**

NOTE: ALL ELECTRODES ARE ISOLATED FROM FLANGE.

UNIT	A	b	c	D	D ₁	F	H	L	p	Q	q	U ₁	U ₂	U ₃	w ₁	w ₂	α
mm	7.47 6.37	5.82 5.56	0.18 0.10	9.73 9.47	9.63 9.42	2.72 2.31	20.71 19.93	5.61 5.16	3.33 3.04	4.63 4.11	18.42	25.15 24.38	6.61 6.09	9.78 9.39	0.51	1.02	
inches	0.294 0.251	0.229 0.219	0.007 0.004	0.383 0.373	0.397 0.371	0.107 0.091	0.815 0.785	0.221 0.203	0.131 0.120	0.182 0.162	0.725	0.99 0.96	0.26 0.24	0.385 0.370	0.02	0.04	45°

MAXIMUM RATINGS

CHARACTERISTICS	SYMBOL	RATINGS	UNITS
Drain-Source Voltage	V _{DSS}	125	V
Drain-Gate Voltage	V _{DGR}	125	V
Gate-Source Voltage	V _{GS}	± 40	V
Drain Current — Continuous	I _D	6	A
Total Device Dissipation	P _D	115	W
Junction Temperature	T _J	200	°C
Storage Temperature Range	T _{STG}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
Drain-Source Breakdown Voltage	V _{(BR)DSS}	I _D =10mA, V _{GS} =0	125	-	-	V
Zero Gate Voltage Drain Current	I _{DSS}	V _{GS} =0V, V _{DS} =50V	-	-	1	mA
Gate-Source Leakage Current	I _{GSS}	V _{GS} =20V, V _{DS} =0V	-	-	1	uA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} = 10 V, I _D = 10mA	1.0	2.5	5.0	V
Forward Transconductance	g _{fs}	V _{DS} = 10 V, I _D = 2.5A	0.8	1.2	-	mhos
Input Capacitance	C _{iss}	V _{DS} = 28 V, V _{GS} = 0 V, f = 1.0 MHz	-	70	-	pF
Output Capacitance	C _{oss}		-	40	-	pF
Reverse Transfer Capacitance	C _{rss}		-	3	-	pF
Common Source Power Gain	G _{PS}	V _{DD} =50V, P _{OUT} =30W, f=30MHz, I _{DQ} = 100 mA	-	18.0	-	dB
Drain Efficiency	η_D		-	40.0	-	%
Common Source Power Gain	G _{PS}	V _{DD} =50V, P _{OUT} =30W, f=175MHz, I _{DQ} = 100 mA	-	15.0	-	dB
Intermodulation Distortion	IMD3	V _{DD} = 50V, Pout = 30W, f= 30; 30.001 MHz, I _{DQ} =100mA	-	-35	-	dB

Note : Above parameters , ratings , limits and conditions are subject to change.