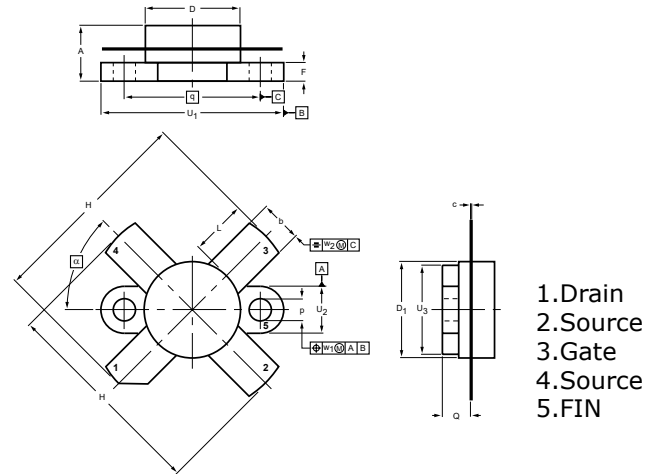


DESCRIPTION

Silicon N-channel enhancement mode vertical D-MOS transistor designed for large signal amplifier applications up to 175 MHz frequency range.

FEATURES

- Output Power: 150 W
- Power Gain: 22 dB Typ@30M, 50V
13 dB Typ@175M, 50V
- Efficiency: 40% Min@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	7.27 6.17	5.82 5.56	0.16 0.10	12.86 12.59	12.83 12.57	2.67 2.41	28.45 25.52	7.93 6.32	3.30 3.05	4.45 3.91	18.42	24.90 24.63	6.48 6.22	12.32 12.06	0.51	1.02	45°
inches	0.286 0.243	0.229 0.219	0.006 0.004	0.506 0.496	0.505 0.495	0.105 0.095	1.120 1.005	0.312 0.249	0.130 0.120	0.175 0.154	0.725	0.98 0.97	0.255 0.245	0.485 0.475	0.02	0.04	

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	16	A
Total Device Dissipation	P _D	300	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 =100mA, V _{GS} =0	125	-	-	V
Zero Gate Voltage Drain Current	I _{DSS}	V _{GS} =0V, V _{DS} =50V	-	-	5	mAdc
Gate-Source Leakage Current	I _{GSS}	V _{GS} =20V, V _{DS} =0V	-	-	1	uAdc
Gate Threshold Voltage	V _{GS(th)}	V _{DS} = 10 V, I _D = 100mA	1.0	3.0	5.0	V
Forward Transconductance	g _{fs}	V _{DS} = 10 V, I _D = 5A	5	7	-	mhos
Input Capacitance	C _{iss}	V _{DS} = 50V, V _{GS} = 0 V, f = 1.0 MHz	-	420	-	pF
Output Capacitance	C _{oss}		-	190	-	pF
Reverse Transfer Capacitance	C _{rss}		-	14	-	pF
Common Source Power Gain	G _{PS}	V _{DD} =50V, P _{OUT} =150W, f=30;	18.0	22.0	-	dB
Drain Efficiency	η _D	30.001MHz, I _{DQ} = 250 mA	40.0	45.0	-	%
Common Source Power Gain	G _{PS}	V _{DD} =50V, P _{OUT} =150W, f=175MHz, I _{DQ} = 250mA	-	13.0	-	dB
Intermodulation Distortion	IMD3	V _{DD} = 50 V, P _{out} = 150 W (PEP), f ₁ =30MHz, f ₂ =30.001 MHz, I _{DQ} = 250 mA	-	-32	-	dB

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