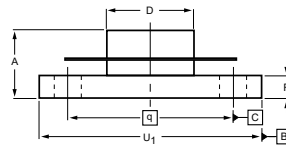


### DESCRIPTION

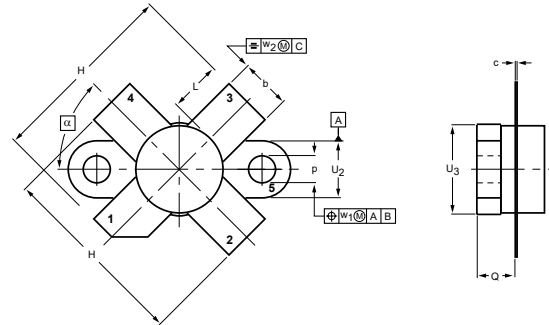
Silicon N-channel enhancement mode vertical D-MOS transistor designed for large signal amplifier applications in the VHF frequency range.



1. Drain
2. Source
3. Gate
4. Source
5. FIN

### FEATURES

- Output Power: 30 W
- Power Gain: 13 dB Min@175M, 28V
- Efficiency: 50% Min



### DIMENSIONS

NOTE: ALL ELECTRODES ARE ISOLATED FROM FLANGE.

UNIT	A	b	c	D	D <sub>1</sub>	F	H	L	p	q	q	U <sub>1</sub>	U <sub>2</sub>	U <sub>3</sub>	w <sub>1</sub>	w <sub>2</sub>	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	45°
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	

### MAXIMUM RATINGS

CHARACTERISTICS	SYMBOL	RATINGS	UNITS
Drain-Source Voltage	V <sub>DSS</sub>	65	V
Gate-Source Voltage	V <sub>GS</sub>	±20	V
Drain Current — Continuous	I <sub>D</sub>	6	A
Total Device Dissipation	P <sub>D</sub>	68	W
Junction Temperature	T <sub>J</sub>	200	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150	°C

### ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX	UNITS
Drain-Source Breakdown Voltage	V <sub>(BR)DSS</sub>	I <sub>D</sub> =10mA, V <sub>GS</sub> =0	65	-	-	V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>GS</sub> =0V, V <sub>DS</sub> =28V	-	-	2	mAdc
Gate-Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> =±20V, V <sub>DS</sub> =0V	-	-	1	uAdc
Gate Threshold Voltage	V <sub>GS(th)</sub>	V <sub>DS</sub> = 10 V, I <sub>D</sub> = 10mA	2.0	-	4.5	V
Forward Transconductance	g <sub>fs</sub>	V <sub>DS</sub> = 10 V, I <sub>D</sub> = 1.5A	1.2	1.9	-	mhos
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = 28 V, V <sub>GS</sub> = 0 V, f = 1.0 MHz	-	90	-	pF
Output Capacitance	C <sub>oss</sub>		-	75	-	pF
Reverse Transfer Capacitance	C <sub>rss</sub>		-	7.5	-	pF
Common Source Power Gain	G <sub>P</sub>	V <sub>DD</sub> =28V, P <sub>OUT</sub> =30W,	13.0	-	-	dB
Drain Efficiency	η <sub>D</sub>	f=175MHz	50	-	-	%

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