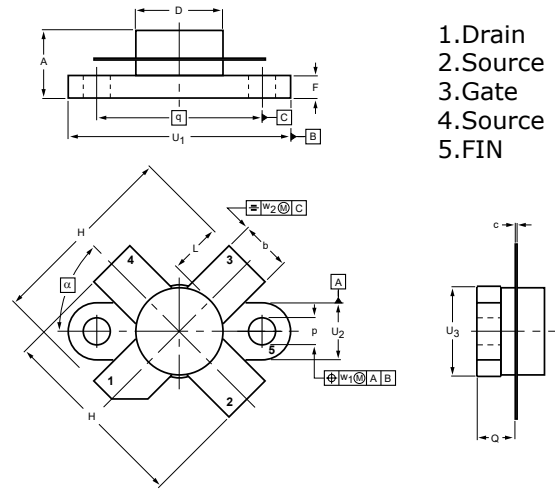


DESCRIPTION

Silicon N-channel enhancement mode vertical D-MOS transistor is designed for wideband large-signal output and driver stages up to 400 MHz range.

FEATURES

- Output Power: 5 W
- Power Gain: 11 dB Min@150M, 28V
10.6 dB Typ@400M, 28V
- Efficiency: 55% Typ@150M, 28V



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	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_{DSS}	65	V
Drain-Gate Voltage	V_{DGR}	65	V
Gate-Source Voltage	V_{GS}	± 40	V
Drain Current — Continuous	I_D	0.9	A
Total Device Dissipation	P_D	17.5	W
Storage Temperature Range	T_{STG}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	$I_D = 5\text{mA}, V_{GS} = 0$	65	-	-	V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{GS} = 0\text{V}, V_{DS} = 28\text{V}$	-	-	1.0	mAdc
Gate-Source Leakage Current	I_{GSS}	$V_{GS} = 20\text{V}, V_{DS} = 0\text{V}$	-	-	1.0	uAdc
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = 10\text{V}, I_D = 10\text{mA}$	1.0	3.5	6.0	V
Forward Transconductance	g_{fs}	$V_{DS} = 10\text{V}, I_D = 100\text{mA}$	80	110	-	mmhos
Input Capacitance	C_{iss}	$V_{DS} = 28\text{V}, V_{GS} = 0\text{V},$ $f = 1.0\text{MHz}$	-	13	-	pF
Output Capacitance	C_{oss}		-	9.4	-	pF
Reverse Transfer Capacitance	C_{rss}		-	1.7	-	pF
Common Source Power Gain	G_{PS}	$V_{DD} = 28\text{V}, P_{OUT} = 5\text{W},$ $f = 400\text{MHz}, I_{DQ} = 50\text{mA}$	-	10.6	-	dB
Common Source Power Gain	G_{PS}	$V_{DD} = 28\text{V}, P_{OUT} = 5\text{W},$ $f = 150\text{MHz}, I_{DQ} = 50\text{mA}$	11.0	14.0	-	dB
Drain Efficiency	η_D	$f = 150\text{MHz}, I_{DQ} = 50\text{mA}$	50.0	55.0	-	%

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