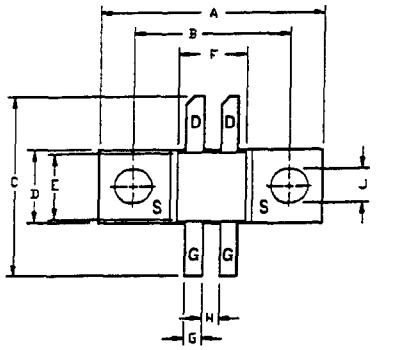
RF MOSFET Power Transistor, 8W, 12V
30 - 90 MHz

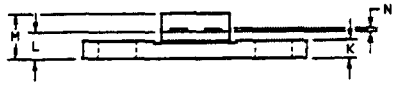
FH2164

V2.00

Features

- N-Channel Enhancement Mode Device
- Meets CECOM Drawing A3012715
- Designed for Frequency Hopping Systems
- 30-90 MHz
- Lower Capacitances for Broadband Operation
- Lower Noise Figure Than Bipolar Devices





LETTER DIM	MILLIMETERS MIN	MILLIMETERS MAX	INCHES MIN	INCHES MAX
A	20.70	20.96	.815	.825
B	14.35	14.61	.565	.575
C	15.67	17.45	.617	.687
D	6.27	6.53	.247	.257
E	6.22	6.48	.245	.255
F	6.22	6.48	.245	.255
G	1.40	1.65	.055	.065
H	1.40	1.65	.055	.065
J	2.92	3.18	.115	.125
K	1.40	1.65	.055	.065
L	1.96	2.46	.077	.097
M	3.61	4.37	.142	.172
N	.08	.13	.003	.005

Absolute Maximum Ratings at 25°C

Parameter	Symbol	Rating	Units
Drain-Source Voltage	V_{DS}	65	V
Gate-Source Voltage	V_{GS}	20	V
Drain-Source Current	I_{DS}	4*	A
Power Dissipation	P_D	61*	W
Junction Temperature	T_J	200	°C
Storage Temperature	T_{STG}	-55 to +150	°C
Thermal Resistance	θ_{JC}	1.5	°C/W

Electrical Characteristics at 25°C

Parameter	Symbol	Min	Max	Units	Test Conditions
Drain-Source Breakdown Voltage	BV_{DSS}	65	-	V	V_{GS}=0.0 V, I_{DS}=5.0 mA*
Drain-Source Leakage Current	I_{DSS}	-	1.0	mA	V_{DS}=28.0 V, V_{GS}=0.0 V*
Gate-Source Leakage Current	I_{GSS}	-	1.0	µA	V_{GS}=20.0 V, V_{DS}=0.0 V*
Gate Threshold Voltage	$V_{GS(TH)}$	2.0	6.0	V	V_{DS}=10.0 V, I_{DS}=100.0 mA*
Forward Transconductance	G_M	500	-	mS	V_{DS}=28.0 V, I_{DS}=1000.0 mA, ΔV_{GS}=1.0 V, 80 µs Pulse*
Input Capacitance	C_{ISS}	-	45	pF	V_{DS}=28.0 V, F=1.0 MHz*
Output Capacitance	C_{OSS}	-	40	pF	V_{DS}=28.0 V, F=1.0 MHz*
Reverse Capacitance	C_{RSS}	-	8	pF	V_{DS}=28.0 V, F=1.0 MHz*
Power Gain	G_P	13	-	dB	V_{DD}=12.0 V, I_{DQ}=600 mA, P_{OUT}=8.0 W, F=88 MHz
Drain Efficiency	η_D	55	-	%	V_{DD}=12.0 V, I_{DQ}=600 mA, P_{OUT}=8.0 W, F=88 MHz
Load Mismatch Tolerance	VSWR-T	-	20:1	-	V_{DD}=12.0 V, I_{DQ}=600 mA, P_{OUT}=8.0 W, F=88 MHz

* Per side

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