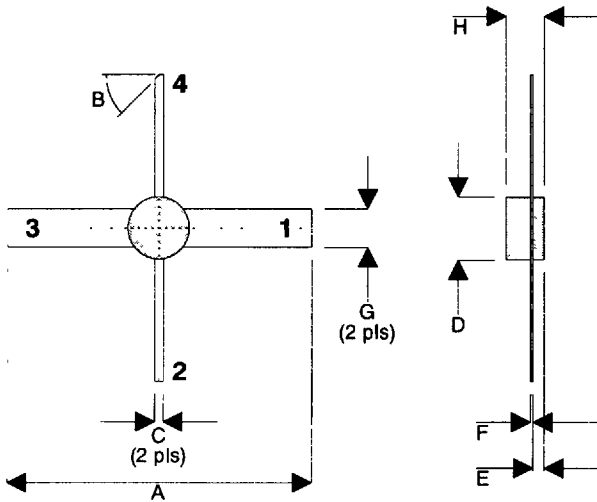


MECHANICAL DATA



PIN 1 SOURCE PIN 2 GATE
 PIN 3 SOURCE PIN 4 DRAIN

DIM	Millimetres	Tol.	Inches	Tol.
A	25.40	0.25	1.00	0.010
B	45°	5°	45°	5°
C	0.76	0.05	0.030	0.002
D	5.21 DIA	0.13	0.205	0.005
E	1.02	0.13	0.040	0.005
F	0.13	0.02	0.005	0.001
G	3.18	0.13	0.125	0.005
H	3.18	REF	0.125	REF

**GOLD METALLISED
 MULTI-PURPOSE SILICON
 DMOS RF FET
 1W – 28V – 2GHz
 SINGLE ENDED**

FEATURES

- SIMPLIFIED AMPLIFIER DESIGN
- SUITABLE FOR BROAD BAND APPLICATIONS
- LOW C_{rss}
- SIMPLE BIAS CIRCUITS
- LOW NOISE
- HIGH GAIN

APPLICATIONS

- HF/VHF/UHF COMMUNICATIONS
 from DC to 2 GHz

ABSOLUTE MAXIMUM RATINGS ($T_{case} = 25^{\circ}C$ unless otherwise stated)

P_D	Power Dissipation	4W
BV_{DSS}	Drain – Source Breakdown Voltage	65V
BV_{GSS}	Gate – Source Breakdown Voltage	$\pm 20V$
$I_{D(sat)}$	Drain Current	1A
T_{stg}	Storage Temperature	-65 to 150°C
T_j	Maximum Operating Junction Temperature	200°C

ELECTRICAL CHARACTERISTICS ($T_{\text{case}} = 25^{\circ}\text{C}$ unless otherwise stated)

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
BV_{DSS} Drain-Source Breakdown Voltage	$V_{\text{GS}} = 0$ $I_{\text{D}} = 10\text{mA}$	65			V
I_{DSS} Zero Gate Voltage Drain Current	$V_{\text{DS}} = 28\text{V}$ $V_{\text{GS}} = 0$			1	mA
I_{GSS} Gate Leakage Current	$V_{\text{GS}} = 20\text{V}$ $V_{\text{DS}} = 0$			1	μA
$V_{\text{GS(th)}}$ Gate Threshold Voltage	$I_{\text{D}} = 10\text{mA}$ $V_{\text{DS}} = V_{\text{GS}}$	1		7	V
g_{fs} Forward Transconductance*	$V_{\text{DS}} = 10\text{V}$ $I_{\text{D}} = 0.2\text{A}$	0.18			mhos
P_{out} Power Output	$V_{\text{DS}} = 28\text{V}$ $I_{\text{DQ}} = 75\text{mA}$ $f = 30\text{MHz}$ $P_{\text{in}} = 5\text{mW}$	750			mW
C_{iss} Input Capacitance	$V_{\text{DS}} = 0\text{V}$ $V_{\text{GS}} = -5\text{V}$ $f = 1\text{MHz}$			12	pF
C_{oss} Output Capacitance	$V_{\text{DS}} = 28\text{V}$ $V_{\text{GS}} = 0$ $f = 1\text{MHz}$			6	
C_{rss} Reverse Transfer Capacitance	$V_{\text{DS}} = 28\text{V}$ $V_{\text{GS}} = 0$ $f = 1\text{MHz}$			0.5	

* Pulse Test: Pulse Duration = 300 μs , Duty Cycle $\leq 2\%$

THERMAL DATA

$R_{\text{THj-case}}$	Thermal Resistance Junction – Case	Max. 30°C / W
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