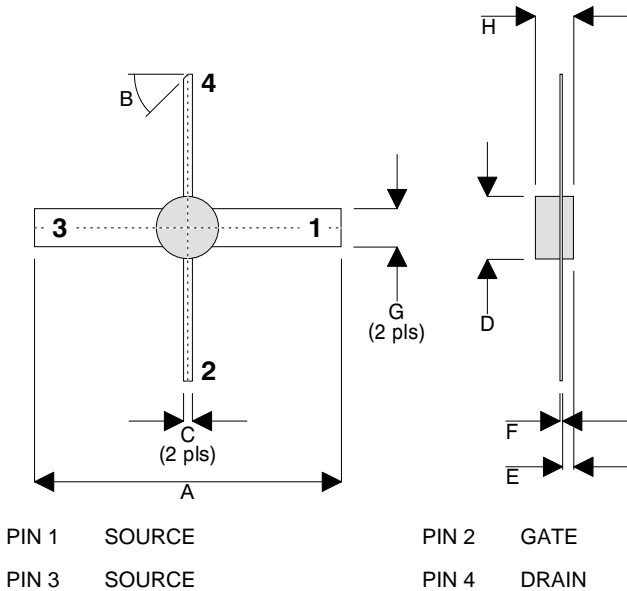


MECHANICAL DATA



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 $150^{\circ}C$
$T_j$	Maximum Operating Junction Temperature	$200^{\circ}C$

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

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

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

**THERMAL DATA**

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