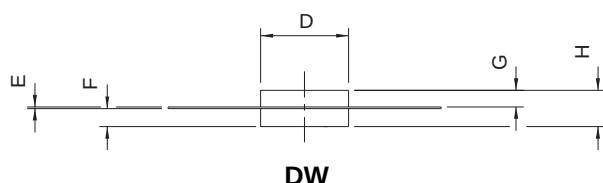
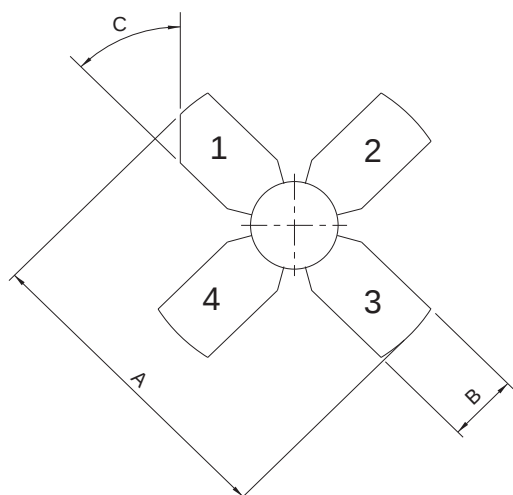


MECHANICAL DATA

GOLD METALLISED MULTI-PURPOSE SILICON DMOS RF FET 5W – 28V – 400MHz SINGLE ENDED



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

DIM	mm	Tol.	Inches	Tol.
A	26.16	0.13	1.030	0.015
B	5.72	0.13	0.225	0.005
C	45°	5°	45°	5°
D	7.11	0.13	0.280	0.005
E	0.13	0.02	0.005	0.001
F	1.52	0.13	0.055	0.005
G	0.43	0.20	0.060	0.008
H	7.67	REF	0.120	REF

FEATURES

- SIMPLIFIED AMPLIFIER DESIGN
- SUITABLE FOR BROAD BAND APPLICATIONS
- LOW C_{rss}
- SIMPLE BIAS CIRCUITS
- LOW NOISE
- HIGH GAIN – 17 dB MINIMUM

APPLICATIONS

- VHF/UHF COMMUNICATIONS
from DC to 1 GHz

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

P_D	Power Dissipation	29W
BV_{DSS}	Drain – Source Breakdown Voltage	65V
BV_{GSS}	Gate – Source Breakdown Voltage	$\pm 20V$
$I_{D(sat)}$	Drain Current	2A
T_{stg}	Storage Temperature	-65 to $150^{\circ}C$
T_j	Maximum Operating Junction Temperature	$200^{\circ}C$

ELECTRICAL CHARACTERISTICS (T_{case} = 25°C unless otherwise stated)

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
B _V DSS Drain–Source Breakdown Voltage	V _{GS} = 0 I _D = 10mA	65			V
I _D DSS Zero Gate Voltage Drain Current	V _{DS} = 28V V _{GS} = 0			2	mA
I _G SS Gate Leakage Current	V _{GS} = 20V V _{DS} = 0			1	μA
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 = 0.4A	0.36			S
G _{PS} Common Source Power Gain	P _O = 5W	17			dB
η Drain Efficiency	V _{DS} = 28V I _{DQ} = 0.2A	40			%
VSWR Load Mismatch Tolerance	f = 400MHz	20:1			—
C _{iss} Input Capacitance	V _{DS} = 0 V _{GS} = –5V f = 1MHz			20	pF
C _{oss} Output Capacitance	V _{DS} = 28V V _{GS} = 0 f = 1MHz			11	pF
C _{rss} Reverse Transfer Capacitance	V _{DS} = 28V V _{GS} = 0 f = 1MHz			1	pF

* Pulse Test: Pulse Duration = 300 μs , Duty Cycle ≤ 2%

HAZARDOUS MATERIAL WARNING

The ceramic portion of the device between leads and metal flange is beryllium oxide. Beryllium oxide dust is highly toxic and care must be taken during handling and mounting to avoid damage to this area.

THESE DEVICES MUST NEVER BE THROWN AWAY WITH GENERAL INDUSTRIAL OR DOMESTIC WASTE.

THERMAL DATA

R _{THj-case}	Thermal Resistance Junction – Case	Max. 6.0°C / W
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