

**15W - 28V - 1GHz**  
**GOLD METALLISED MULTI-PURPOSE**  
**SILICON DMOS RF FET**

**FEATURES**

- METAL GATE
- EXTRA LOW  $C_{rss}$
- BROAD BAND
- SIMPLE BIAS CIRCUITS
- LOW NOISE
- HIGH GAIN

**APPLICATIONS**

- HF/VHF/UHF COMMUNICATIONS  
from DC to 1 GHz

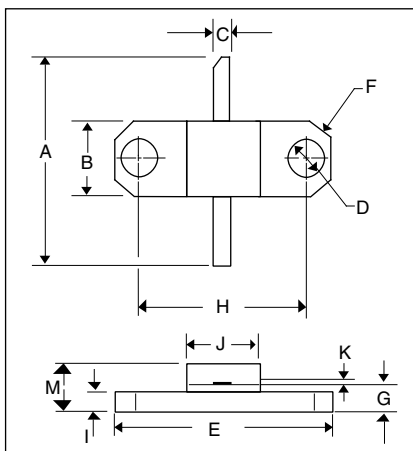
**ABSOLUTE MAXIMUM RATINGS**  
( $T_{CASE} = 25^{\circ}C$  unless otherwise stated)

$P_d$	Power Dissipation	50W
$BV_{DSS}$	Drain-source breakdown voltage	65V
$V_{GSS}$	Gate-source voltage	$\pm 20V$
$I_D$	Drain Current	5A
$T_{stg}$	Storage temperature	65 to 150°C
$T_j$	Maximum operating junction temperature	200°C
$R_{Thj-case}$	Thermal resistance junction-case	Max. 2.5°C/W

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

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
$BV_{DSS}$	Breakdown voltage, drain source $V_{GS}=0$ $I_D=10mA$	65			Vdc
$I_{DSS}$	Drain leakage current $V_{DS}=28V$ $V_{GS}=0$			1.0	mAdc
$I_{GSS}$	Gate leakage current $V_{GS}=20V$ $V_{DS}=0$			1	$\mu$ Adc
$V_{GS(th)}$	Gate threshold voltage $I_D=10mA$ $V_{DS}=V_{GS}$	1		7	Vdc
gfs	Transconductance (300 $\mu$ s pulse) $V_{DS}=10V$ $I_D=1.0A$	1.0			Mhos
$G_{PS}$	Common source power gain $P_o=15W$	13			dB
$\eta$	Drain efficiency $V_{DS}=28V$ $I_{DQ}=1.0A$	40			%
VSWR	Load mismatch tolerance $f=1GHz$	20:1			
$C_{iss}$	Input capacitance $V_{DS}=0V$ $V_{GS}=-5V$ $f=1MHz$			60	pF
$C_{oss}$	Output capacitance $V_{DS}=28V$ $V_{GS}=0$ $f=1MHz$			24	pF
$C_{rss}$	Reverse transfer capacitance $V_{DS}=28V$ $V_{GS}=0$ $f=1MHz$			2	pF

**DIMENSIONS**



DM	Millimeter	TOL	Inches	TOL
A	16.51	.25	.650	.010
B	6.35	.13	.250	.005
C	1.52	.13	.060	.005
D	3.30	.13	.130	.005
E	18.92	.05	.745	.002
F	1.27 X 45°	.13	.030 X 45°	.005
G	2.16	.13	.085	.005
H	14.22	.05	.560	.002
I	1.52	.13	.060	.005
J	6.35	.13	.250	.005
K	0.10	.02	.004	.001
M	5.08	MAX	.200	MAX

**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.

U.S. PATENTS 5,121,176 & 5,179,032  
GLOBAL PATENTS PENDING