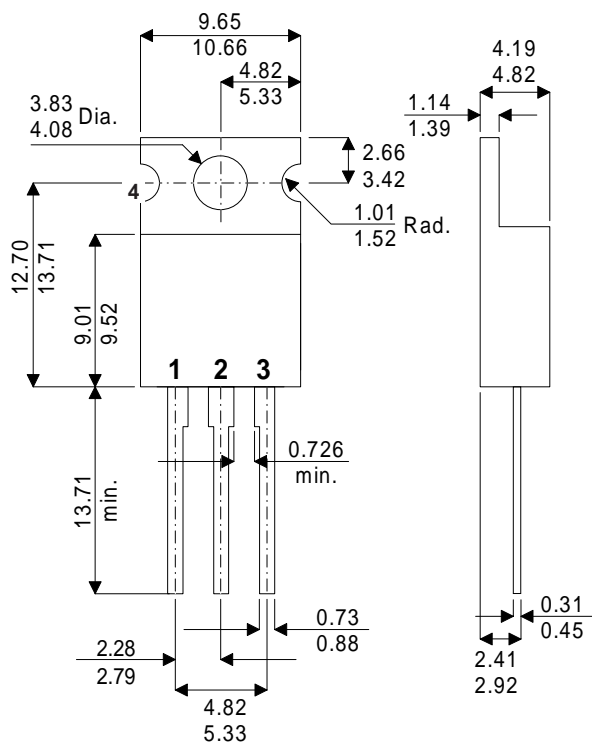


MECHANICAL DATA

Dimensions in mm (inches)


TO-220 PLASTIC PACKAGE

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

GOLD METALLISED MULTI-PURPOSE SILICON DMOS RF FET 4W – 28V – 200MHz SINGLE ENDED

FEATURES

- SIMPLIFIED AMPLIFIER DESIGN
- SUITABLE FOR BROAD BAND APPLICATIONS
- LOW C_{rss}
- SIMPLE BIAS CIRCUITS
- LOW NOISE
- HIGH GAIN – 13dB MINIMUM
- SURFACE MOUNT

APPLICATIONS

- LOW COST DC to 200 MHz

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

P_D	Power Dissipation	62.5W
BV_{DSS}	Drain – Source Breakdown Voltage	70V
BV_{GSS}	Gate – Source Breakdown Voltage	$\pm 20\text{V}$
$I_{D(sat)}$	Drain Current	5A
T_{STG}	Storage Temperature	-65 to 125°C
T_J	Maximum Operating Junction Temperature	150°C

ELECTRICAL CHARACTERISTICS (T_C = 25°C unless otherwise stated)

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
BV _{DSS} Drain-Source Breakdown Voltage	V _{GS} = 0 I _D = 10mA	70			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	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 = 1A	0.8			S
G _{PS} Common Source Power Gain	V _{DS} = 28V I _{DQ} = 0.1A P _O = 4W f = 200MHz	13			dB
η Drain Efficiency		40			%
VSWR Load Mismatch Tolerance		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			30	
C _{rss} Reverse Transfer Capacitance	V _{DS} = 28V V _{GS} = 0 f = 1MHz			2.5	

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

THERMAL DATA

R _{THj-case}	Thermal Resistance Junction – Case	Max. 2°C / W
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