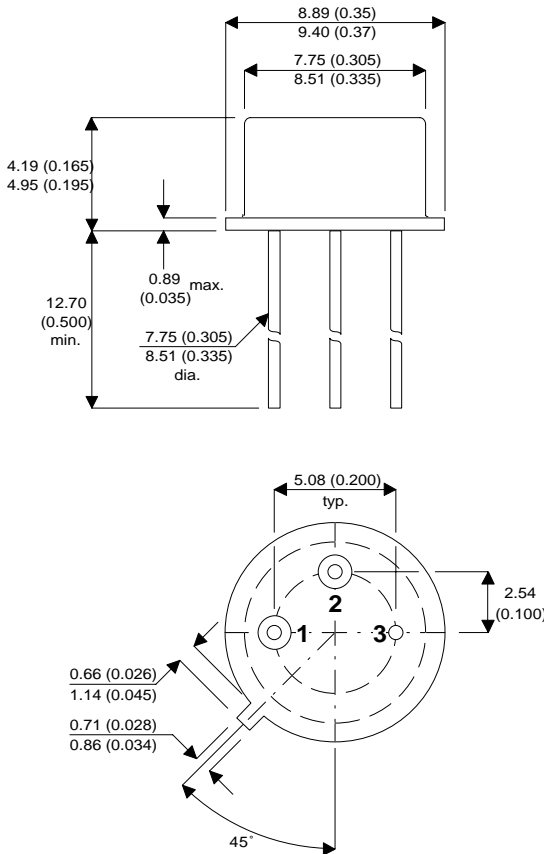


MECHANICAL DATA



TO-39 PACKAGE

PIN1 – DRAIN PIN2 – GATE PIN3 – SOURCE

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

FEATURES

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

APPLICATIONS

- VHF COMMUNICATIONS
from DC to 400MHz

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 ($T_{case} = 25^{\circ}C$ 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	$V_{DS} = 28V$ $V_{GS} = 0$			2	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*	$V_{DS} = 10V$ $I_D = 0.4A$	0.36			S
G_{PS} Common Source Power Gain	$P_O = 5W$	13			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 $\leq 2\%$

THERMAL DATA

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