

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			1	mA
I _G DSS 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 = 0.2A	0.18			S
G _{PS} Common Source Power Gain	P _O = 2.5W	13			dB
η Drain Efficiency	V _{DS} = 28V I _{DQ} = 0.1A	40			%
VSWR Load Mismatch Tolerance	f = 1GHz	20:1			—
C _{iss} Input Capacitance	V _{DS} = 28V V _{GS} = -5V f = 1MHz			12	pF
C _{oss} Output Capacitance	V _{DS} = 28V V _{GS} = 0 f = 1MHz			6	pF
C _{rss} Reverse Transfer Capacitance	V _{DS} = 28V V _{GS} = 0 f = 1MHz			0.5	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. 10°C / W
-----------------------	------------------------------------	---------------

Semelab Plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.

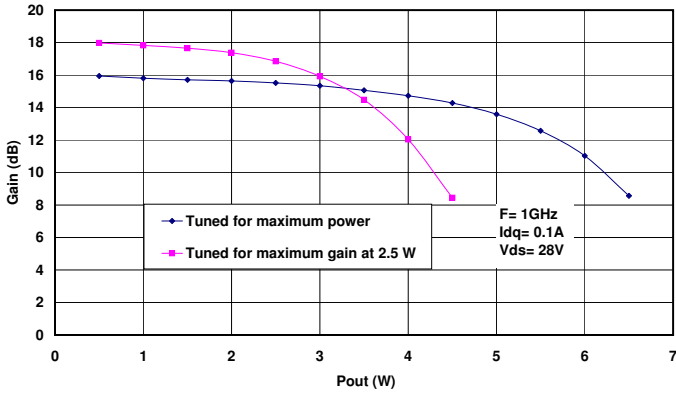


Figure 1
Gain vs. Output Power.

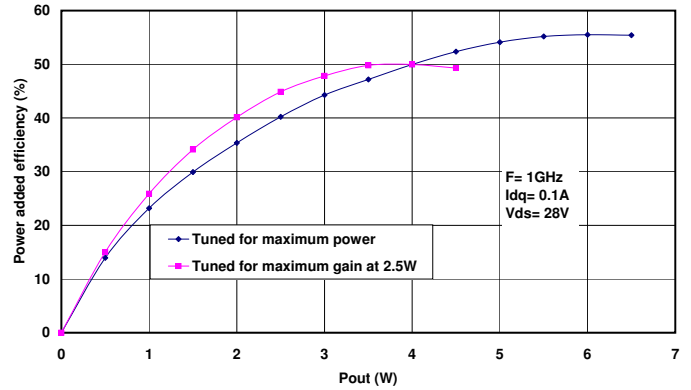


Figure 2
Power added efficiency vs. Output Power.

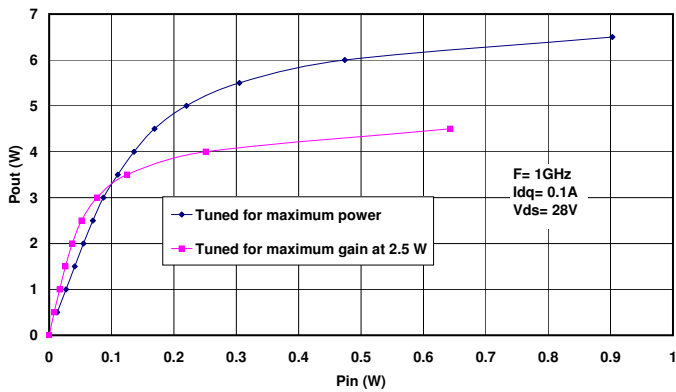


Figure 3
Output Power vs. Input Power.

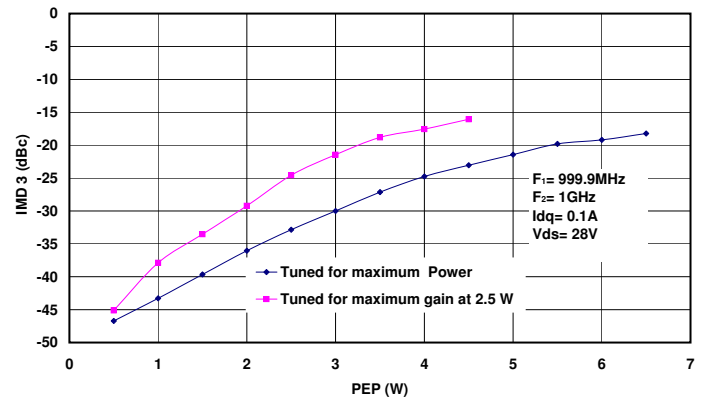


Figure 4
IMD 3 vs. PEP

Typical S Parameters

! Vds=28V, Idq=0.1A
MHz S MA R 50

!Freq !MHz	S11 mag	ang	S21 mag	ang	S12 mag	ang	S22 mag	ang
100	0.966	-47	16.778	144	0.01479	56	0.923	-28
200	0.891	-81	12.882	118	0.02114	34	0.841	-48
300	0.841	-103	9.772	99	0.02213	20	0.794	-62
400	0.804	-120	7.674	84	0.01995	11	0.759	-73
500	0.804	-134	6.237	69	0.01641	6	0.75	-86
600	0.804	-143	4.955	59	0.01175	9	0.767	-97
700	0.822	-147	4.121	54	0.00906	41	0.776	-101
800	0.822	-154	3.631	45	0.01109	73	0.813	-107
900	0.841	-162	3.162	36	0.01718	88	0.813	-116
1000	0.832	-168	2.6	30	0.02344	94	0.804	-122

Semelab Plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.

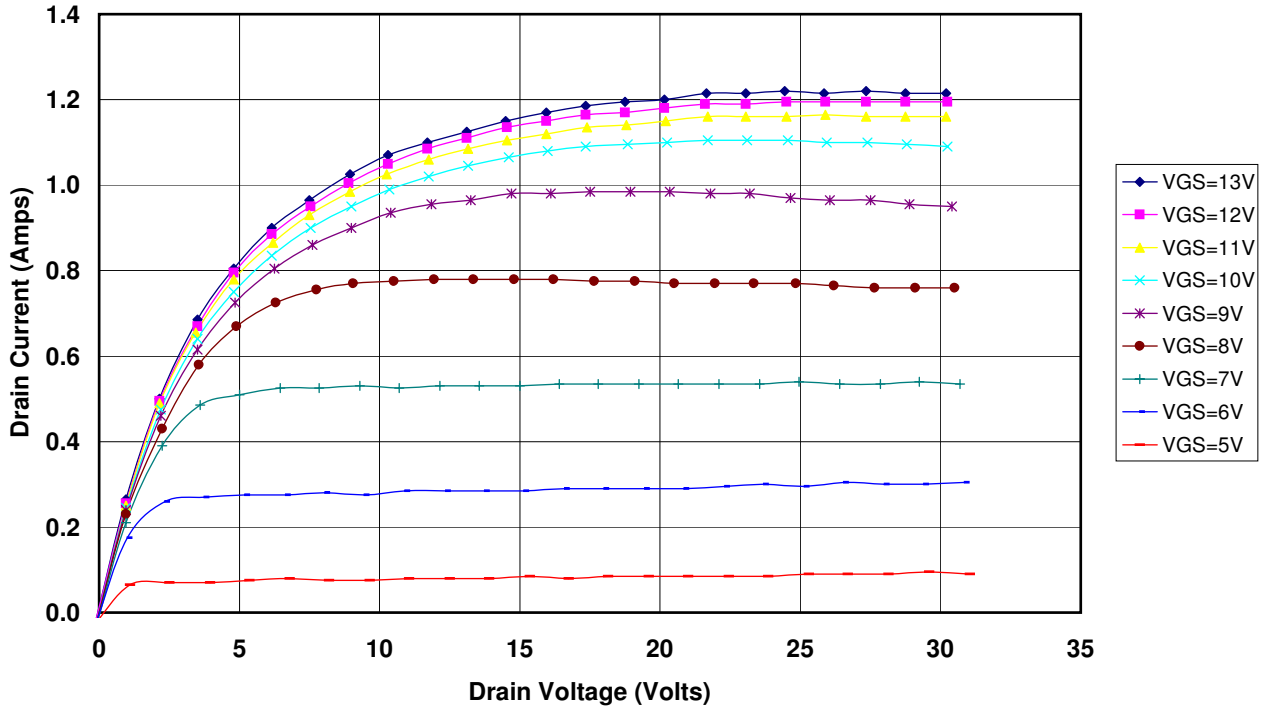


Figure 5 – Typical IV Characteristics.

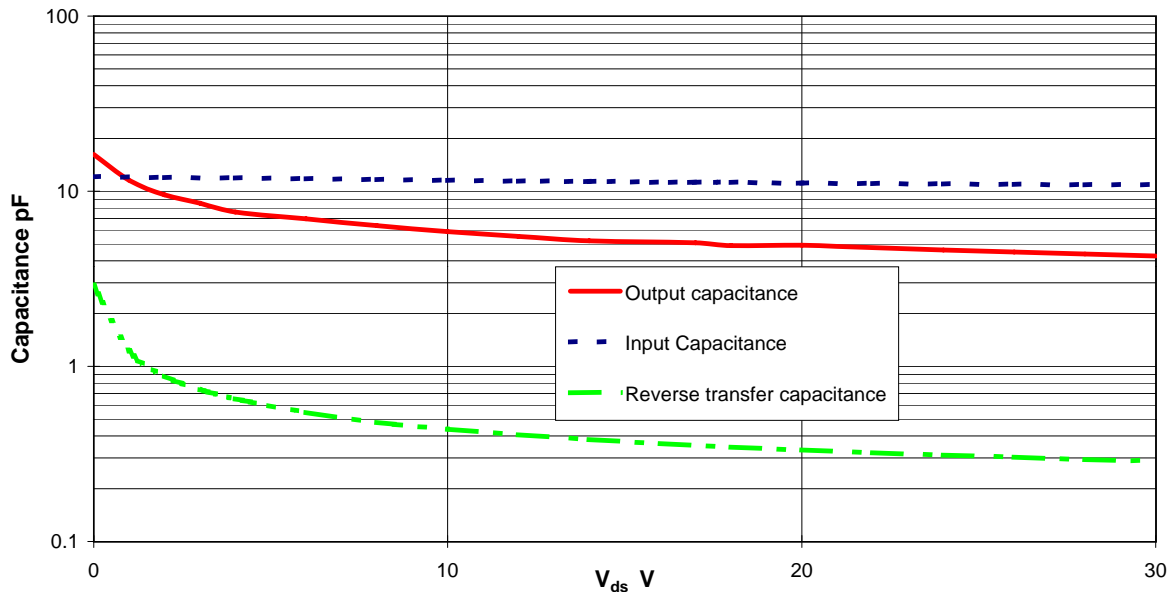
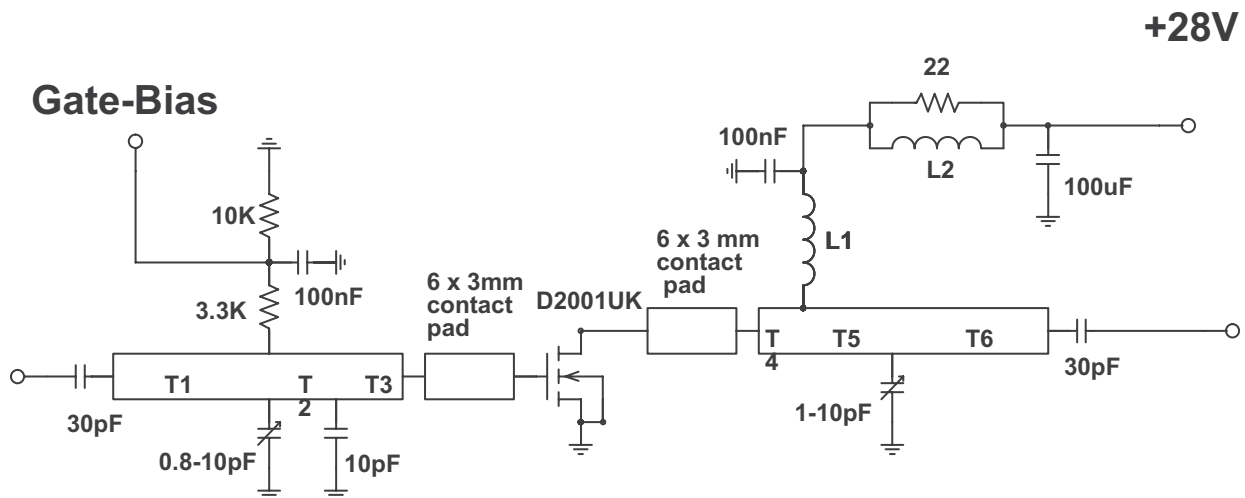


Figure 6 – Typical CV Characteristics.

Semelab Plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.



D2001UK 1GHz TEST FIXTURE

Substrate 0.8mm PTFE/glass, $\epsilon_r = 2.5$
 All microstrip lines $W = 2.4\text{mm}$

T1	35 mm
T2, T5	15 mm
T3	3 mm
T4	4 mm
T6	32 mm

L1	7 turns 24swg enamelled copper wire, 3mm i.d.
L2	1.5 turns 24swg enamelled copper wire on ferrite core

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TT Electronics:](#)

[D2001UK](#)

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9