
2SK2595

Silicon N-Channel MOS FET
UHF Power Amplifier

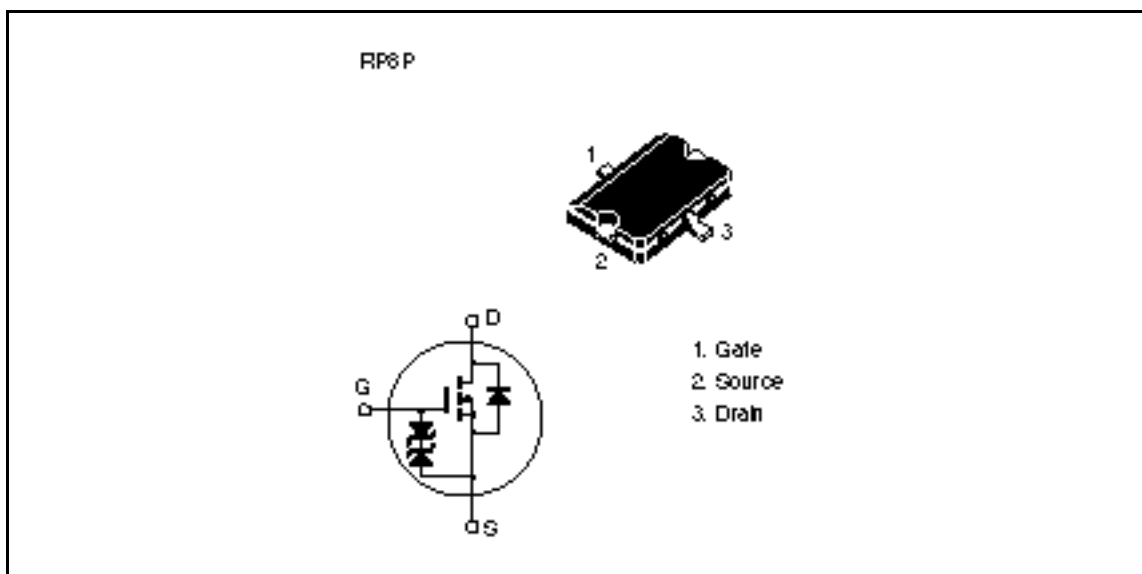
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1st. Edition

Features

- Σ High power output, High gain, High efficiency
PG = 7.8dB, Pout = 37.3dBm, hD = 50 %min. (f = 836.5MHz)
- Σ Compact package capable of surface mounting

Outline



This Device is sensitive to Electrostatic Discharge.
An Adequate handling procedure is requested.

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Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	Unit
Drain to source voltage	V_{DSS}	17	V
Gate to source voltage	V_{GSS}	±10	V
Drain current	I_D	1.1	A
Drain peak current	$I_{D(pulse)}^{*1}$	5	A
Channel dissipation	P_{ch}^{*2}	20	W
Channel temperature	Tch	150	°C
Storage temperature	Tstg	−45 to +150	°C

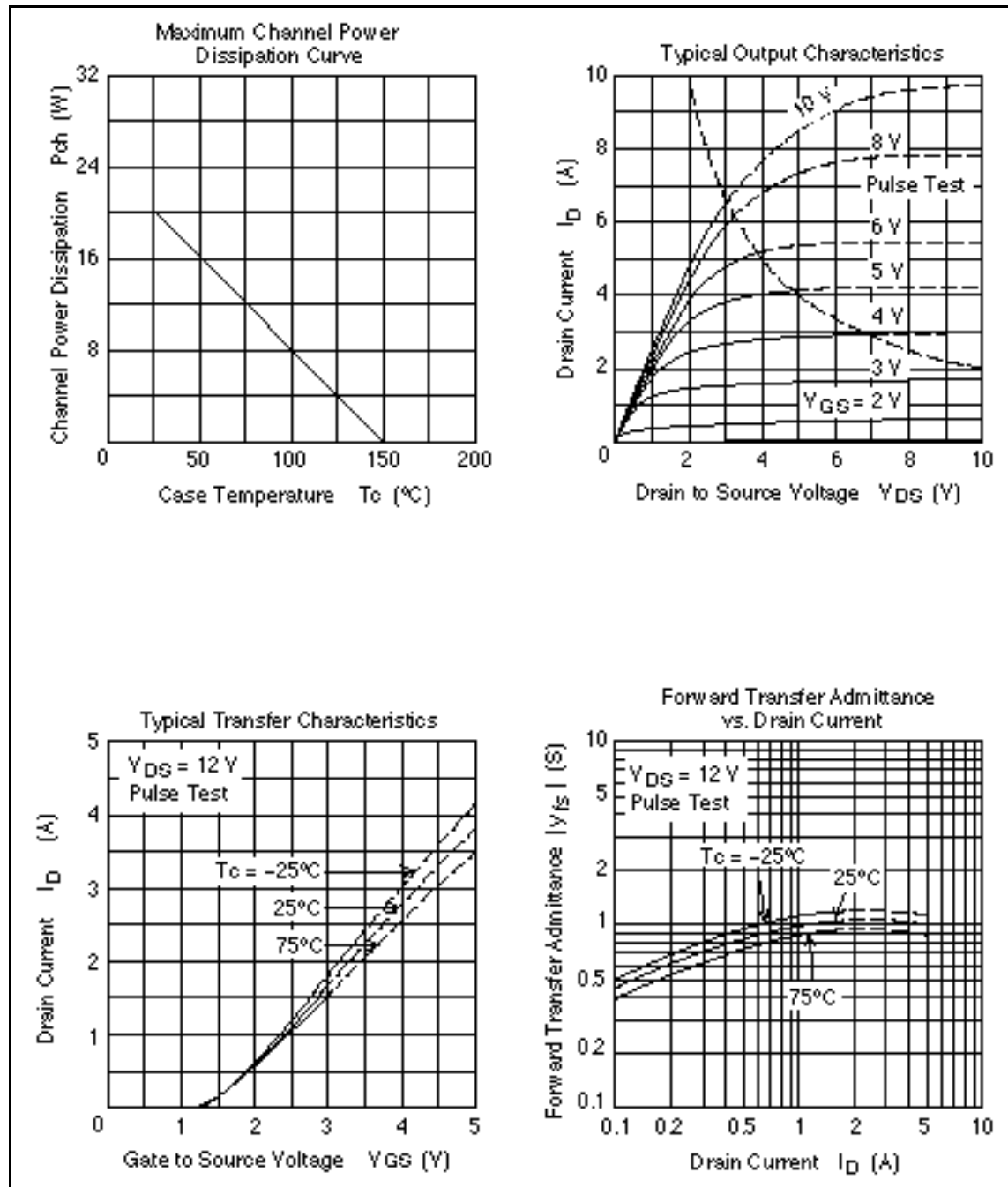
Notes: 1. PW ≤ 10ms, duty cycle ≤ 1 %

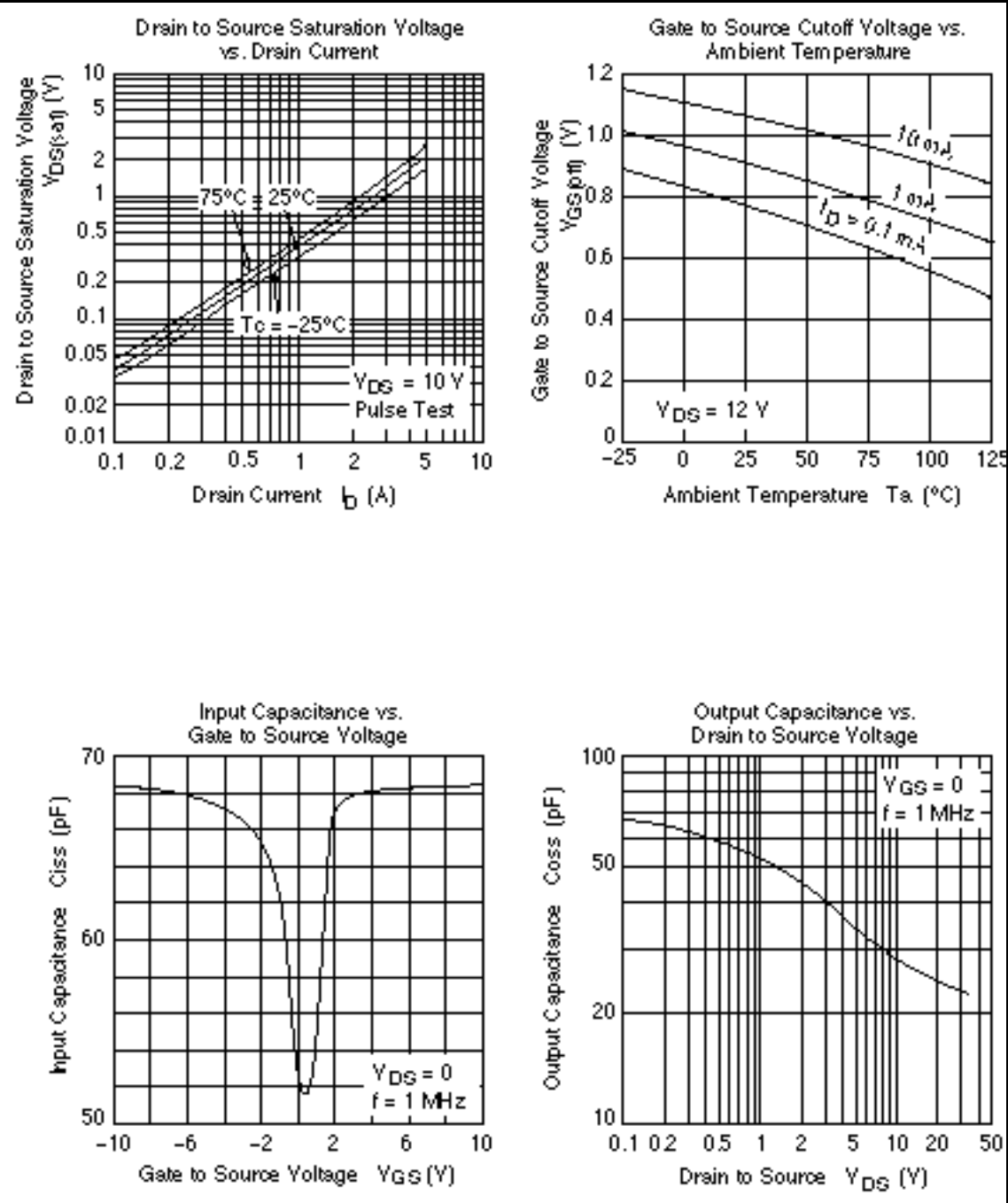
2. Value at Tc = 25°C

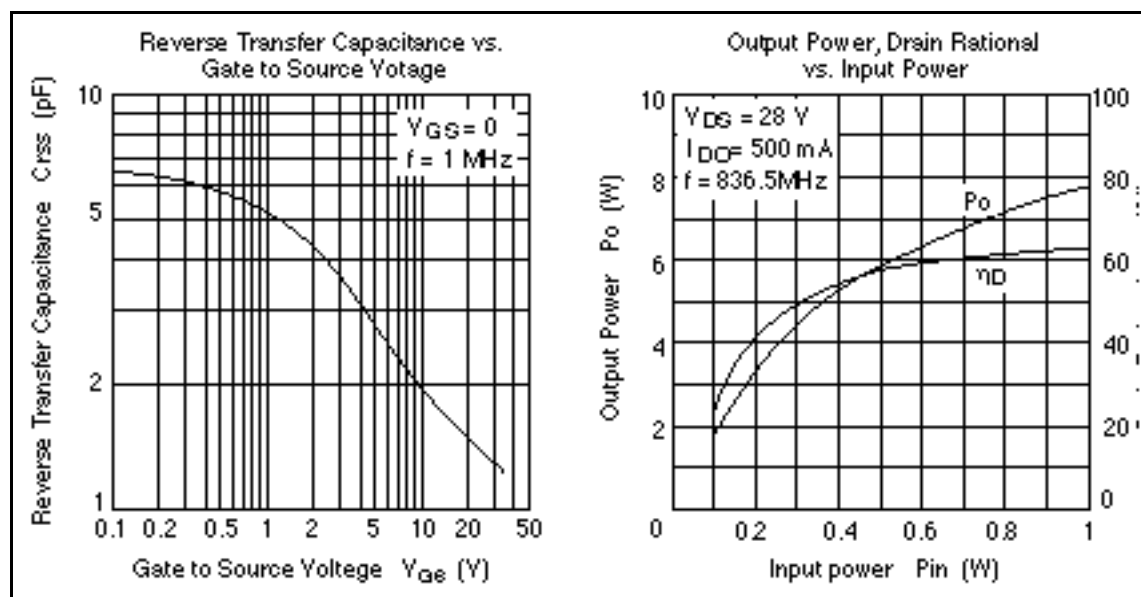
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min.	Typ	Max.	Unit	Test Conditions
Zero gate voltage drain current	I_{DSS}	—	—	10	mA	$V_{DS} = 12\text{ V}, V_{GS} = 0$
Gate to source leak current	I_{GSS}	—	—	±5.0	mA	$V_{GS} = \pm 10\text{ V}, V_{DS} = 0$
Gate to source cutoff voltage	$V_{GS(off)}$	0.6	—	1.3	V	$I_D = 6\text{ mA}, V_{DS} = 12\text{ V}$
Input capacitance	C_{iss}	—	68	—	pF	$V_{GS} = 5\text{ V}, V_{DS} = 0$ $f = 1\text{ MHz}$
Output capacitance	C_{oss}	—	27	—	pF	$V_{DS} = 12\text{ V}, V_{GS} = 0$ $f = 1\text{ MHz}$
Output Power	P_{out}	37.3	38.45	—	dBm	$V_{DS} = 12\text{ V},$ $f = 836.5\text{ MHz}$ $P_{in} = 29.5\text{ dBm}$
Drain Rational	hD	50	60	—	%	$V_{DS} = 12\text{ V}$ $P_{out} = 37.3\text{ dBm}$ $f = 836.5\text{ MHz}$ $P_{in} = 29.5\text{ dBm}$

Main Characteristics



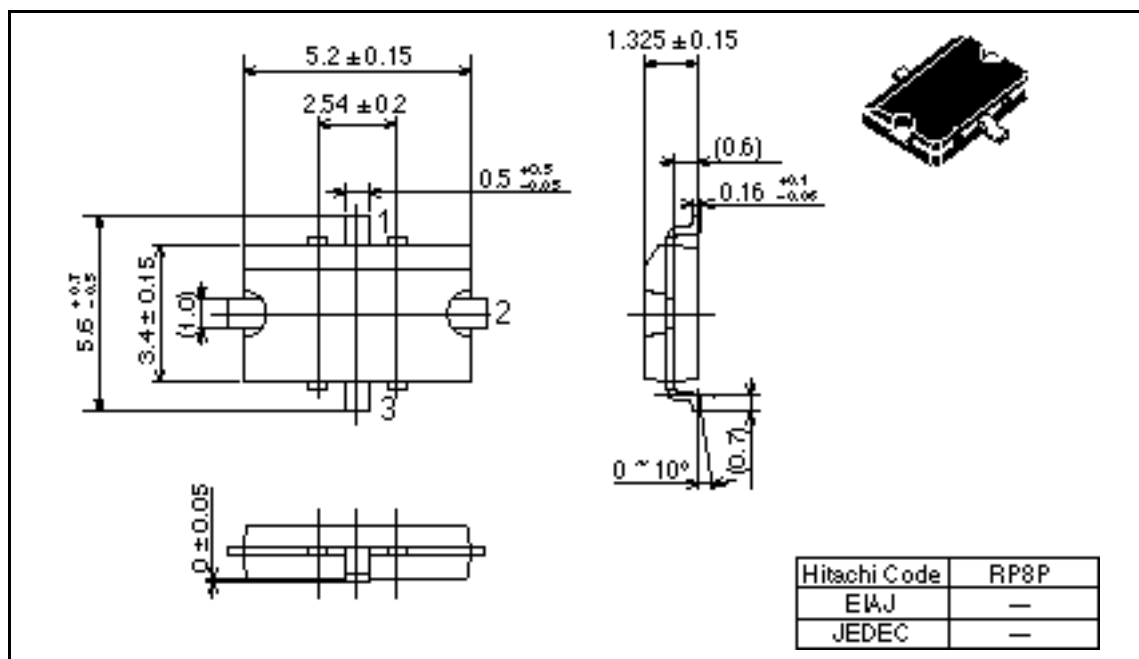




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Package Dimensions

Unit: mm



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