2SK2795

Silicon N Channel MOS FET
UHF Power Amplifier

HITACHI

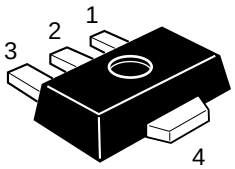
ADE-208-466 A (Z)
2nd. Edition
November. 1996

Features

- High power output, High gain, High effeciency
  PG = 11dB, Pout = 24dBm, ηD = 40 %min. (f = 836.5MHz)
- Compact package capable of surface mounting

Outline

UPAK



1. Gate
2. Source
3. Drain
4. Source

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

2SK2795

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	Unit
Drain to source voltage	VDSS	10	V
Gate to source voltage	VGSS	±6	V
Drain current	ID	0.17	A
Drain peak current	ID(pulse)*1	0.3	A
Channel dissipation	Pch*2	1	W
Channel temperature	Tch	150	°C
Storage temperature	Tstg	–45 to +150	°C

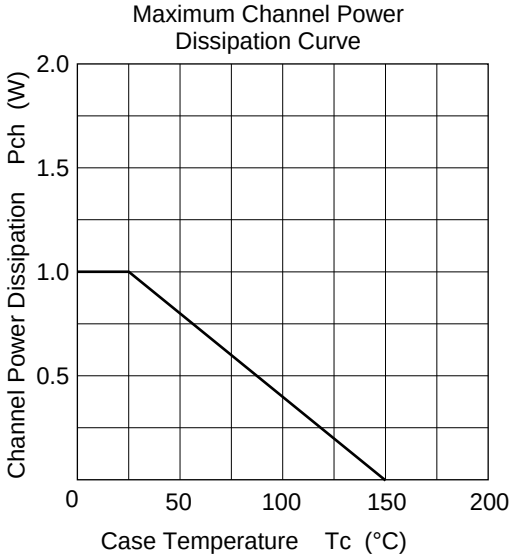
Note: 1. PW ≤ 10ms, duty cycle ≤ 50 %
2. Value at Tc = 25°C

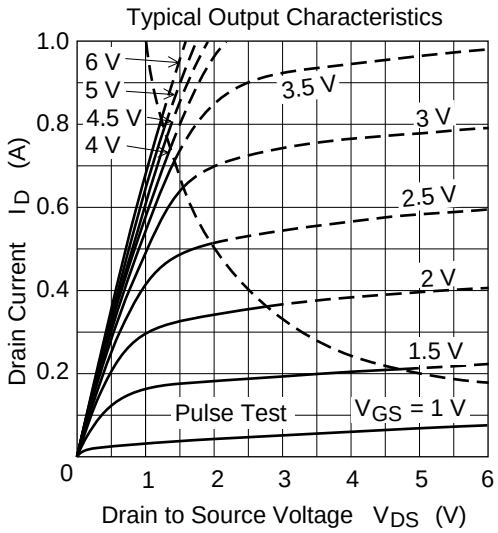
Electrical Characteristics (Ta = 25°C)

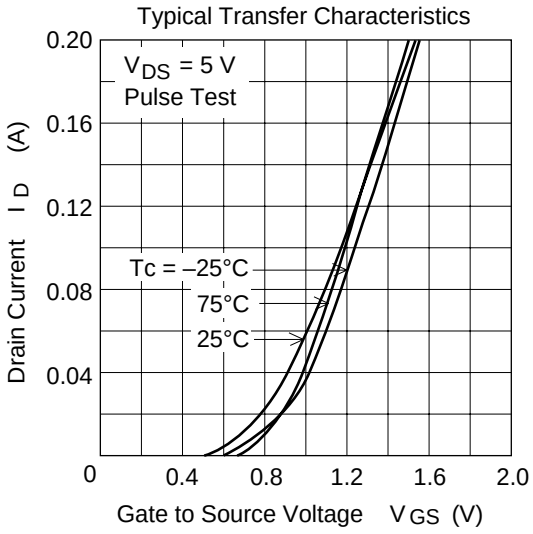
Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Zero gate voltege drain current	IDSS	—	—	10	µA	VDS = 10 V, VGS = 0
Gate to source leak current	IGSS	—	—	±5.0	µA	VGS = ±6V, VDS = 0
Gate to source cutoff voltage	VGS(off)	0.3	—	1.0	V	ID = 1mA, VDS = 5V
Input capacitance	Ciss	—	9.5	—	pF	VGS = 2V, VDS = 0 f = 1MHz
Output capacitance	Coss	—	4.5	—	pF	VDS = 5, VGS = o f = 1MHz
Output Power	Pout	24	—	—	dBm	VDS = 4.7V f =836.5MHz Pin = 13dBm
Drain Rational	ηD	40	—	—	%	VDS = 4.7V f =836.5MHz Pin = 13dBm

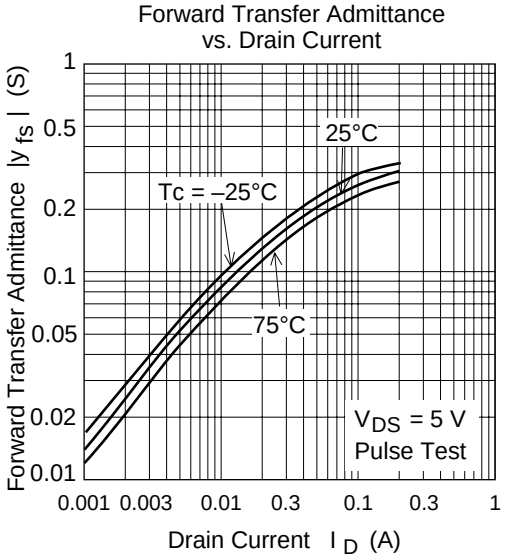
Note: 3. Marking is " DX ".

Main Characteristics

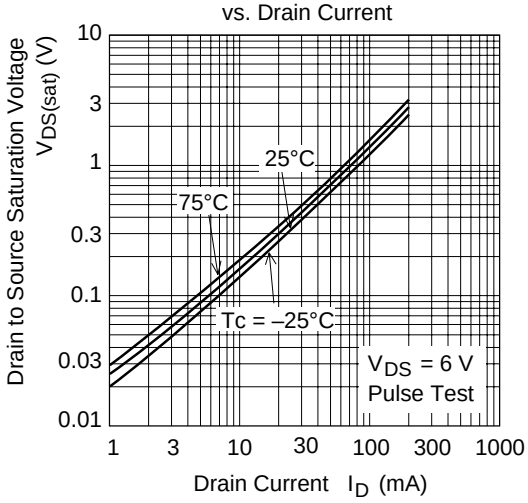




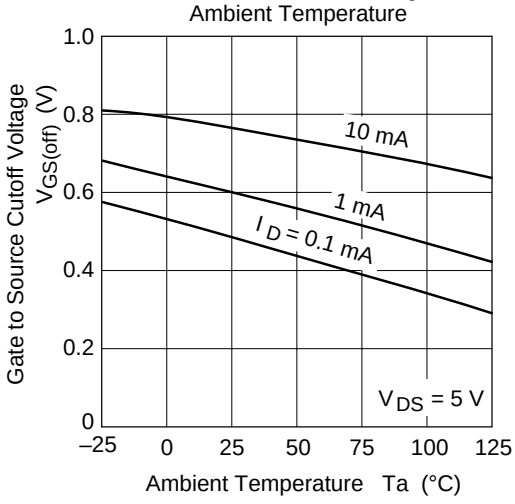




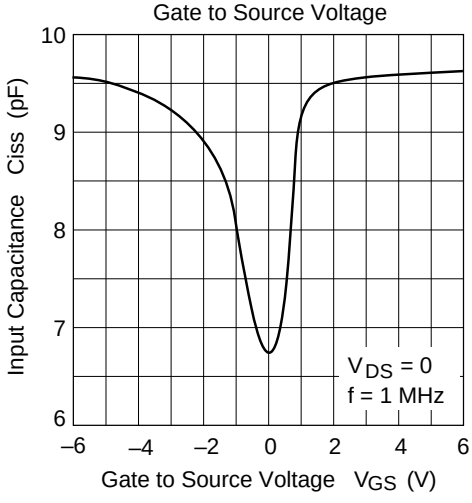
Drain to Source Saturation Voltage vs. Drain Current



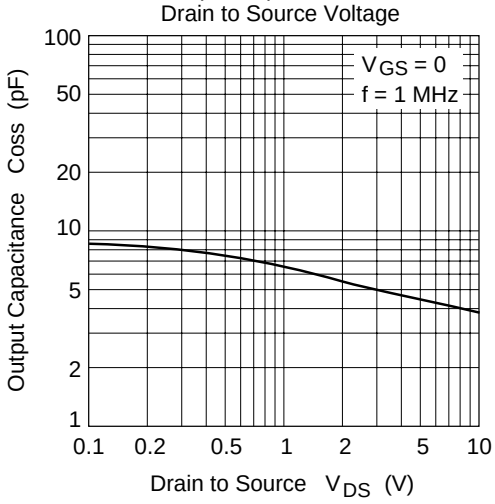
Gate to Source Cutoff Voltage vs. Ambient Temperature



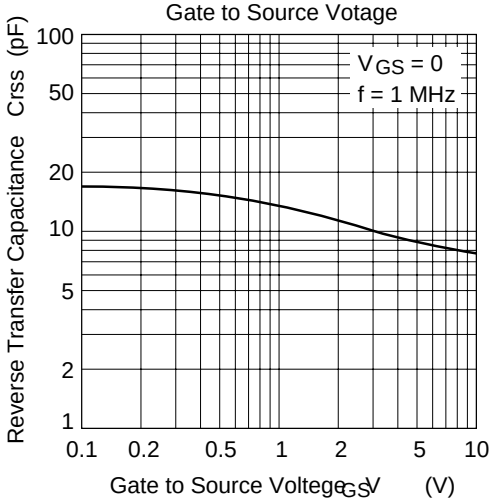
Input Capacitance vs. Gate to Source Voltage



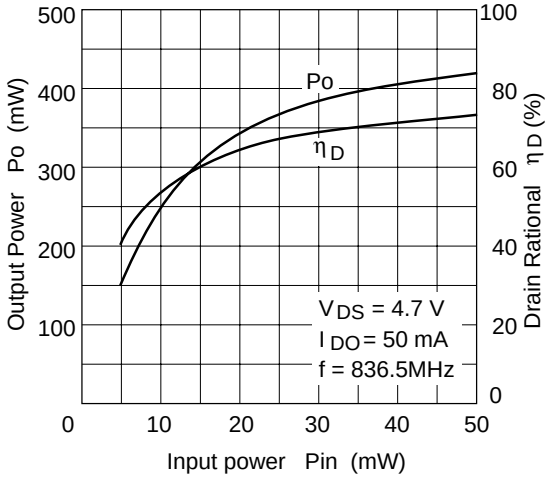
Output Capacitance vs. Drain to Source Voltage



Reverse Transfer Capacitance vs. Gate to Source Votage



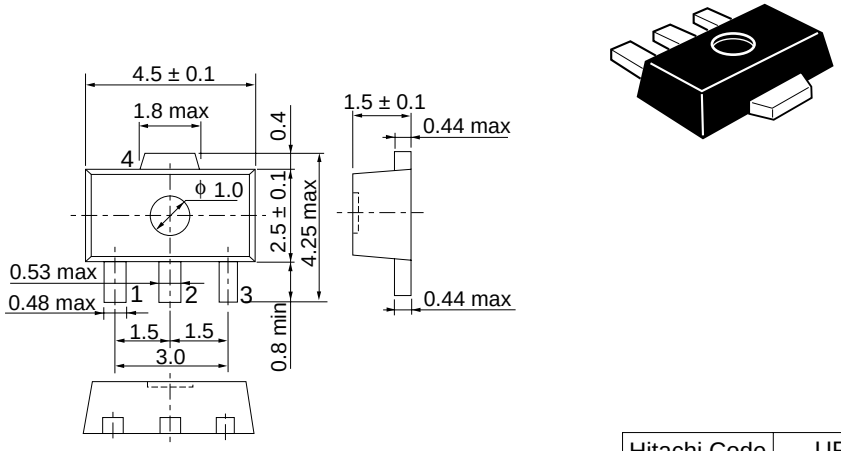
Output Power, Drain Rational vs. Input Power



2SK2795

Package Dimensions

Unit: mm



Hitachi Code	UPAK
EIAJ	SC–62
JEDEC	—