# 2SK3796



# N-Channel JFET 30V, 0.6 to 3.0mA, 6.5mS, SMCP

http://onsemi.com

# **Applications**

· Low-frequency general-purpose amplifier, impedance conversion, analog switches applications

### **Features**

- · Small IGSS
- · Small Ciss

# **Specifications**

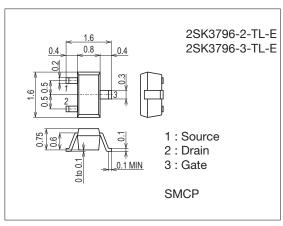
## **Absolute Maximum Ratings** at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V <sub>DSX</sub>		30	V
Gate-to-Drain Voltage	V <sub>GDS</sub>		-30	V
Gate Current	IG		10	mA
Drain Current	ID		10	mA
Allowable Power Dissipation	PD		100	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

# **Package Dimensions**

unit : mm (typ) 7013A-011

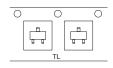


### **Product & Package Information**

• Package : SMCP

• JEITA, JEDEC : SC-75, SOT-416 • Minimum Packing Quantity : 3,000 pcs./reel

# Packing Type: TL





Marking

### **Electrical Connection**



### ORDERING INFORMATION

See detailed ordering and shipping information on page 2 of this data sheet.

### **Electrical Characteristics** at Ta=25°C

Parameter	Symbol Conditions	Conditions	Ratings			Unit
Faranteter		min	typ	max	Oill	
Gate-to-Drain Breakdown Voltage	V(BR)GDS	I <sub>G</sub> =-10μA, V <sub>DS</sub> =0V	-30			V
Gate Cutoff Current	IGSS	V <sub>G</sub> S=-20V, V <sub>D</sub> S=0V			-1.0	nA
Cutoff Voltage	V <sub>GS</sub> (off)	V <sub>DS</sub> =10V, I <sub>D</sub> =1μA	-0.18	-0.95	-2.2	V
Drain Current	IDSS	V <sub>DS</sub> =10V, V <sub>GS</sub> =0V	0.6*		3.0*	mA
Forward Transfer Admittance	yfs	V <sub>DS</sub> =10V, V <sub>GS</sub> =0V, f=1kHz	3.0	6.5		mS
Input Capacitance	Ciss	V <sub>DS</sub> =10V, V <sub>GS</sub> =0V, f=1MHz		4		pF
Reverse Transfer Capacitance	Crss	V <sub>DS</sub> =10V, V <sub>GS</sub> =0V, f=1MHz		1.1		pF
Static Drain-to-Source On-State Resistance	R <sub>DS</sub> (on)	V <sub>DS</sub> =10mV, V <sub>GS</sub> =10V		200		Ω

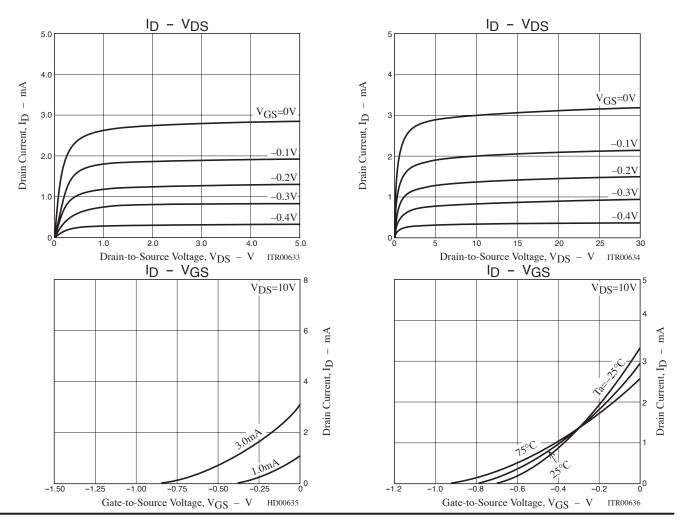
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

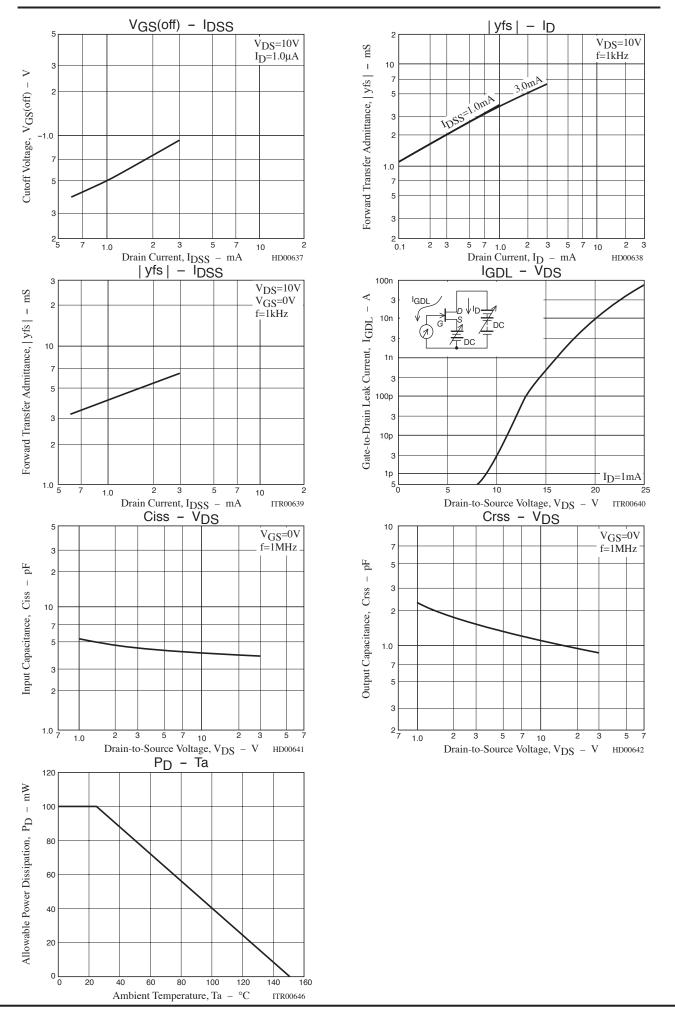
# \*: The 2SK3796 is classified by IDSS as follows: (unit: mA)

Rank	2	3
IDSS	0.6 to 1.5	1.2 to 3.0

# **Ordering Information**

Device	Package	Shipping	memo	
2SK3796-2-TL-E	SMCP	3,000pcs./reel	Pb Free	
2SK3796-3-TL-E SMCP		3,000pcs./reel	Pb Free	



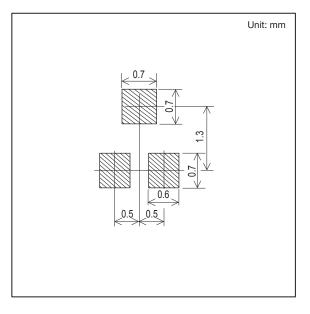


### **Outline Drawing**

2SK3796-2-TL-E, 2SK3796-3-TL-E

# Mass (g) Unit 0.003 \*For reference mm

### **Land Pattern Example**



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