



2SK3796

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

ON Semiconductor®

<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

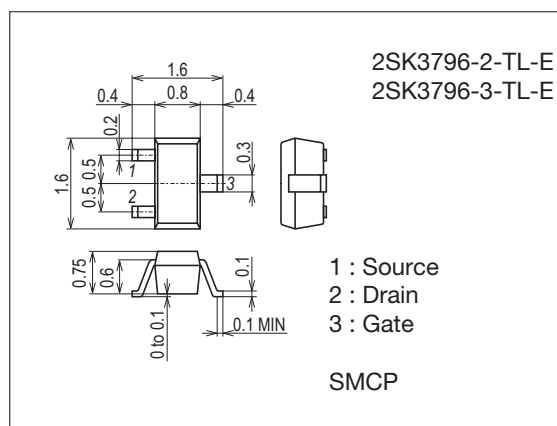
Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSX}		30	V
Gate-to-Drain Voltage	V _{GDS}		-30	V
Gate Current	I _G		10	mA
Drain Current	I _D		10	mA
Allowable Power Dissipation	P _D		100	mW
Junction Temperature	T _j		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

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)

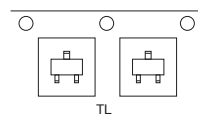
7013A-011



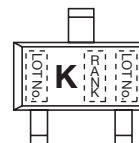
Product & Package Information

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

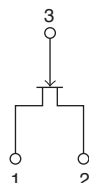
Packing Type: TL



Marking



Electrical Connection



ORDERING INFORMATION

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

Electrical Characteristics at $T_a=25^{\circ}\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	$V_{(BR)GDS}$	$I_G=-10\mu\text{A}$, $V_{DS}=0\text{V}$	-30			V
Gate Cutoff Current	I_{GSS}	$V_{GS}=-20\text{V}$, $V_{DS}=0\text{V}$			-1.0	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS}=10\text{V}$, $I_D=1\mu\text{A}$	-0.18	-0.95	-2.2	V
Drain Current	I_{DSS}	$V_{DS}=10\text{V}$, $V_{GS}=0\text{V}$	0.6*		3.0*	mA
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=10\text{V}$, $V_{GS}=0\text{V}$, $f=1\text{kHz}$	3.0	6.5		mS
Input Capacitance	C_{iss}	$V_{DS}=10\text{V}$, $V_{GS}=0\text{V}$, $f=1\text{MHz}$		4		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS}=10\text{V}$, $V_{GS}=0\text{V}$, $f=1\text{MHz}$		1.1		pF
Static Drain-to-Source On-State Resistance	$R_{DS(on)}$	$V_{DS}=10\text{mV}$, $V_{GS}=10\text{V}$		200		Ω

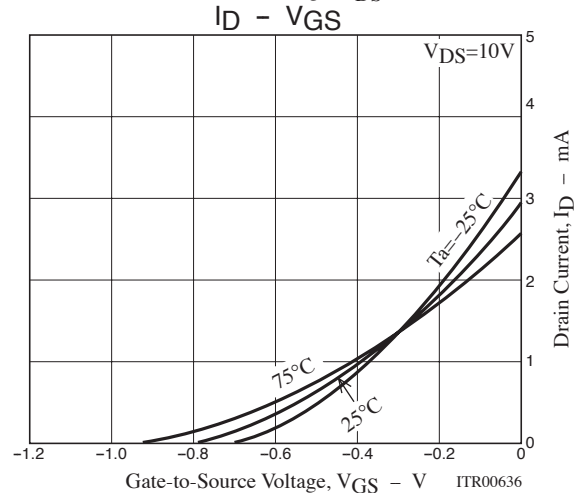
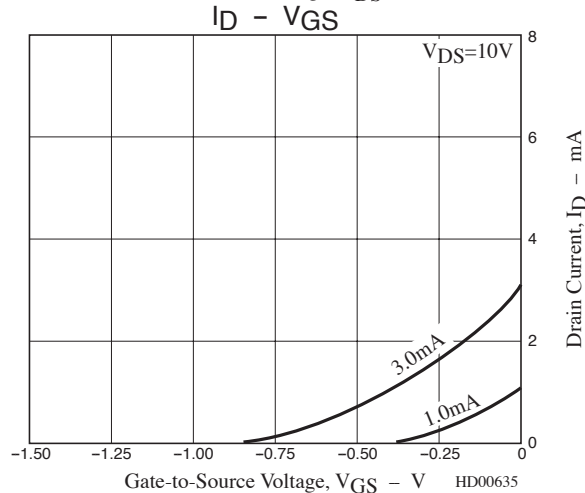
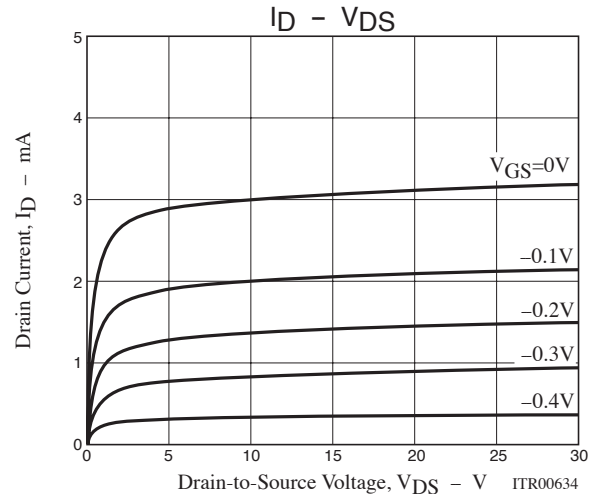
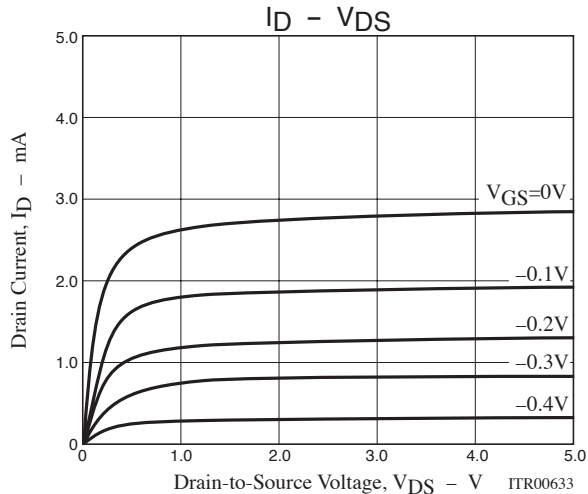
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

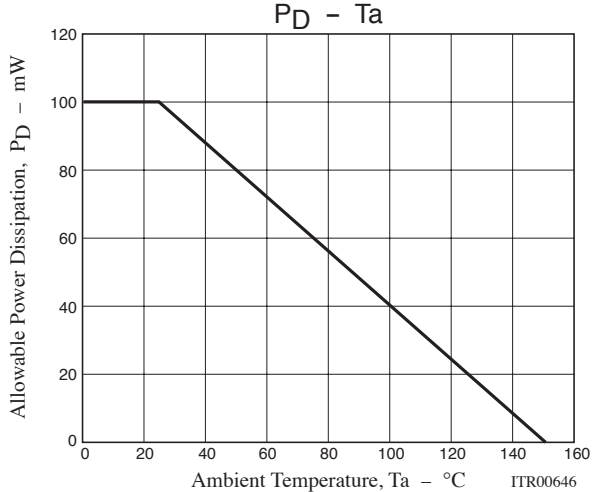
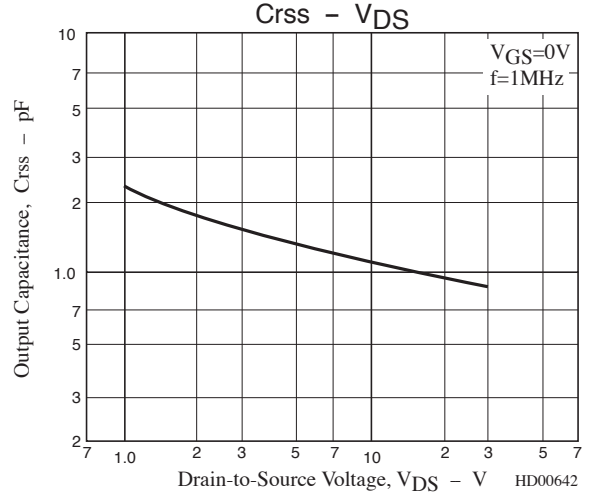
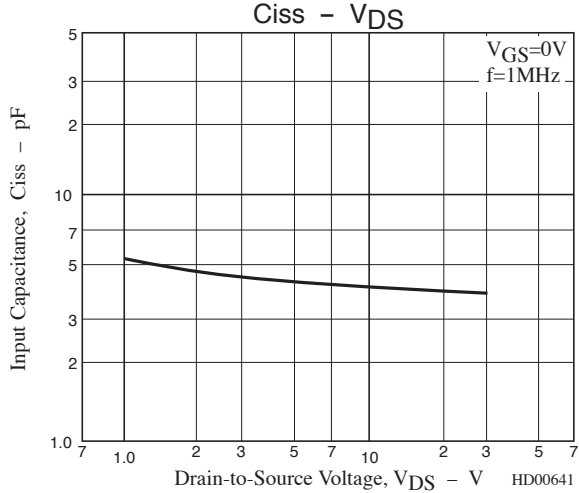
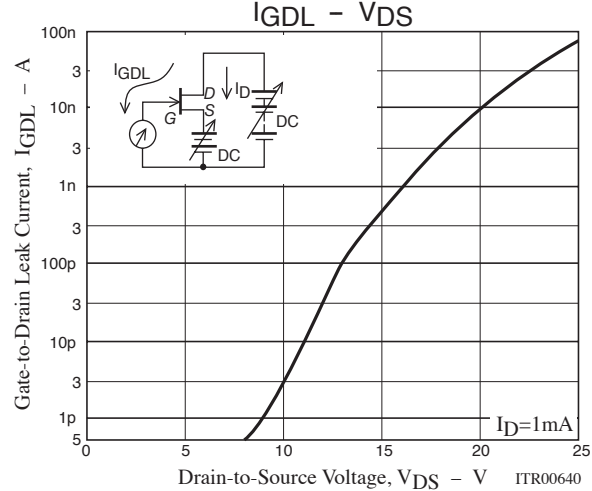
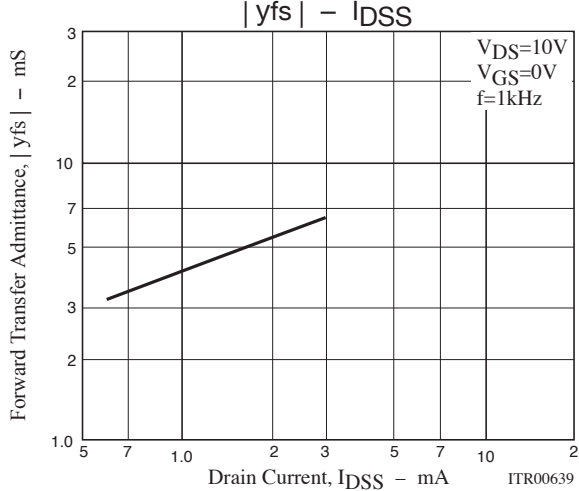
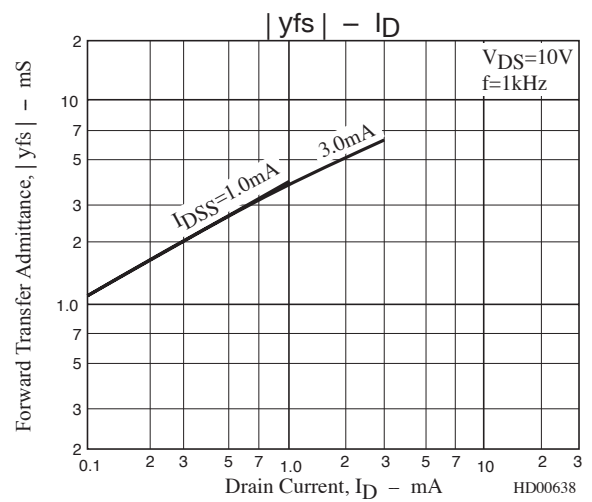
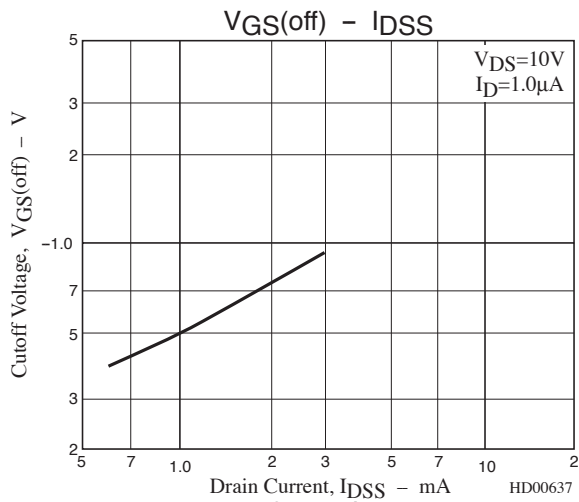
* : The 2SK3796 is classified by I_{DSS} as follows : (unit : mA)

Rank	2	3
I_{DSS}	0.6 to 1.5	1.2 to 3.0

Ordering Information

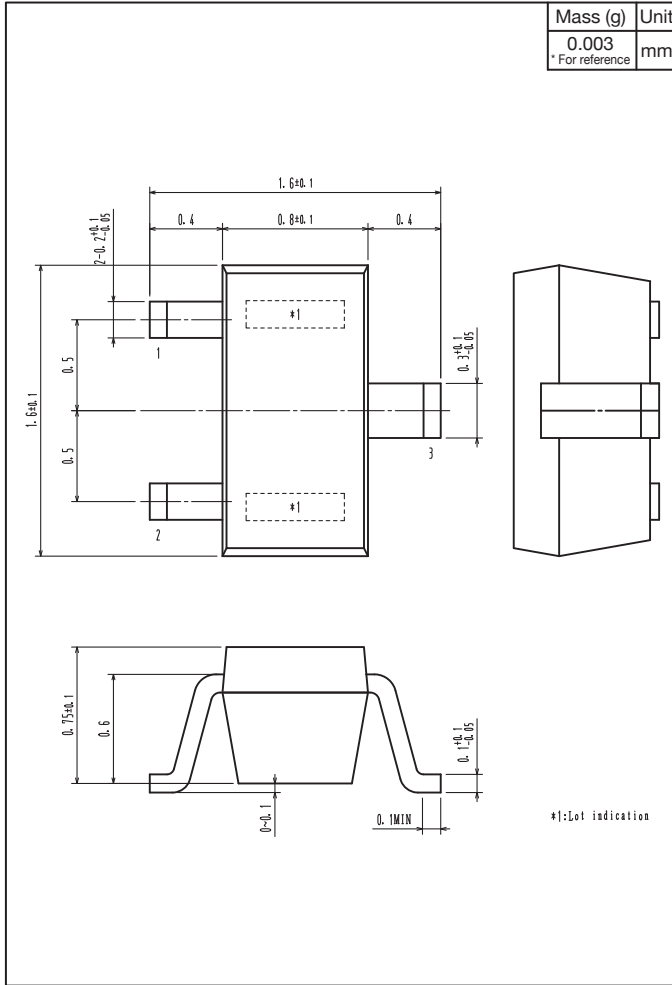
Device	Package	Shipping	memo
2SK3796-2-TL-E	SMCP	3,000pcs./reel	Pb Free
2SK3796-3-TL-E	SMCP	3,000pcs./reel	



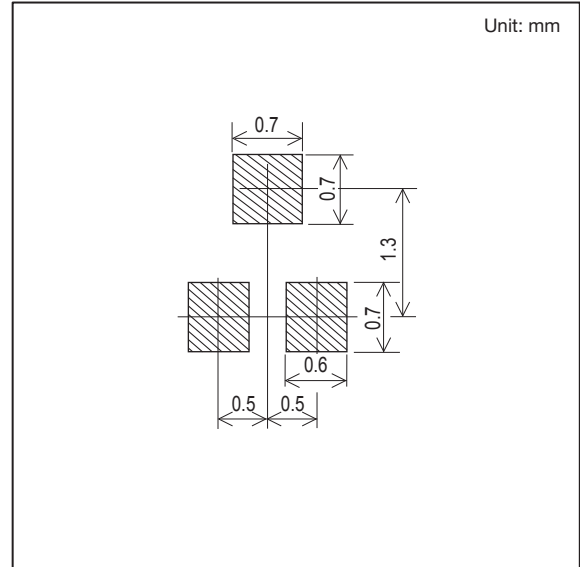


Outline Drawing

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



Land Pattern Example



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