



2SK3796

N-Channel JFET 30V, 0.6 to 6.0mA, 6.5mS, SMCP

ON Semiconductor®

<http://onsemi.com>

Applications

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

Features

- Small I_{GSS}
- Small C_{iss}

Specifications

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

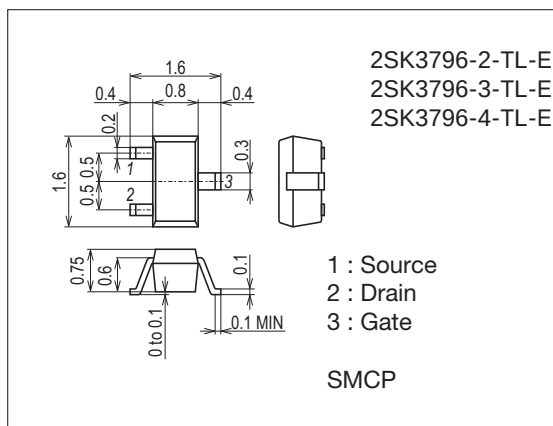
Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSX}		30	V
Gate-to-Drain Voltage	V_{GDS}		-30	V
Gate Current	I_G		10	mA
Drain Current	I_D		10	mA
Allowable Power Dissipation	P_D		100	mW
Junction Temperature	T_j		150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

Package Dimensions

unit : mm (typ)

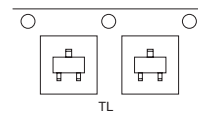
7013A-011



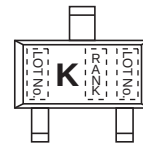
Product & Package Information

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

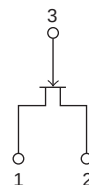
Packing Type: TL



Marking



Electrical Connection



Electrical Characteristics at Ta=25°C

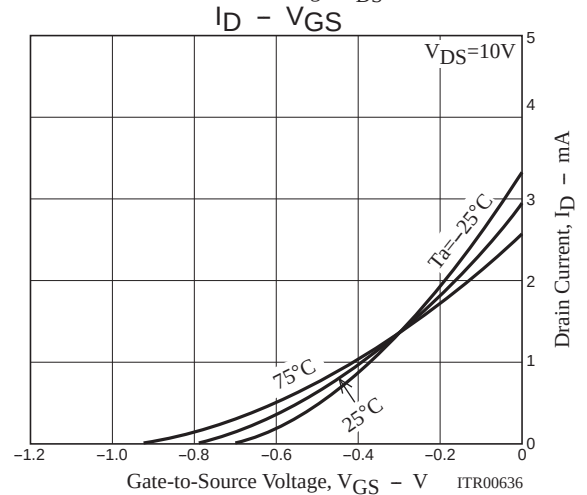
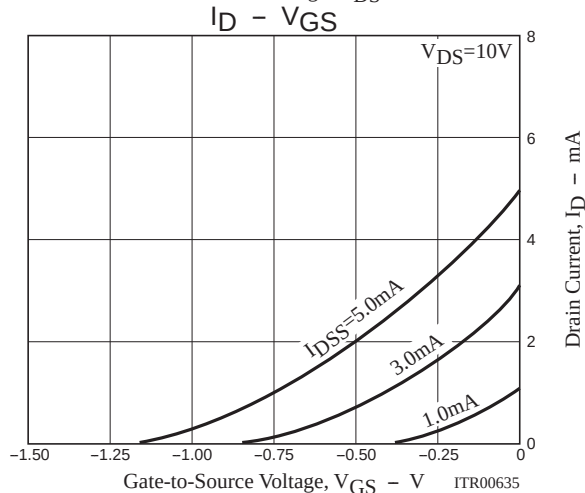
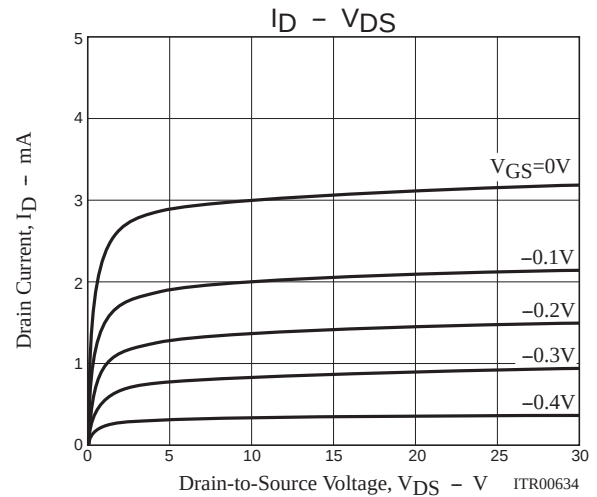
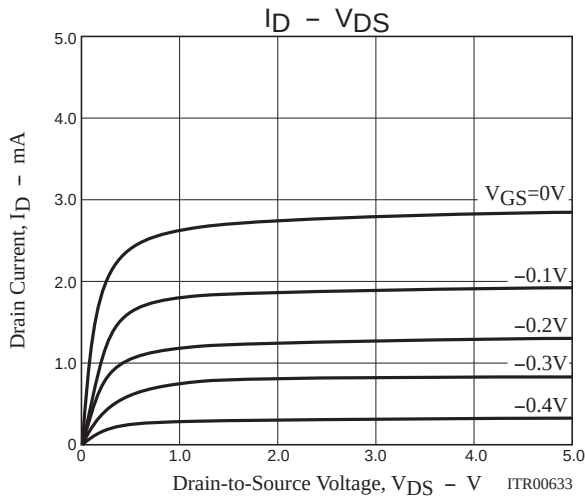
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	V(BR)GDS	I _G =-10μA, V _{DS} =0V	-30			V
Gate Cutoff Current	I _{GSS}	V _{GS} =-20V, V _{DS} =0V			-1.0	nA
Cutoff Voltage	V _{GS(off)}	V _{DS} =10V, I _D =1μA	-0.18	-0.95	-2.2	V
Drain Current	I _{DSS}	V _{DS} =10V, V _{GS} =0V	0.6*		6.0*	mA
Forward Transfer Admittance	y _{fs}	V _{DS} =10V, V _{GS} =0V, f=1kHz	3.0	6.5		mS
Input Capacitance	C _{iss}	V _{DS} =10V, V _{GS} =0V, f=1MHz		4		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} =10V, V _{GS} =0V, f=1MHz		1.1		pF
Static Drain-to-Source On-State Resistance	R _{DS(on)}	V _{DS} =10mV, V _{GS} =10V		200		Ω

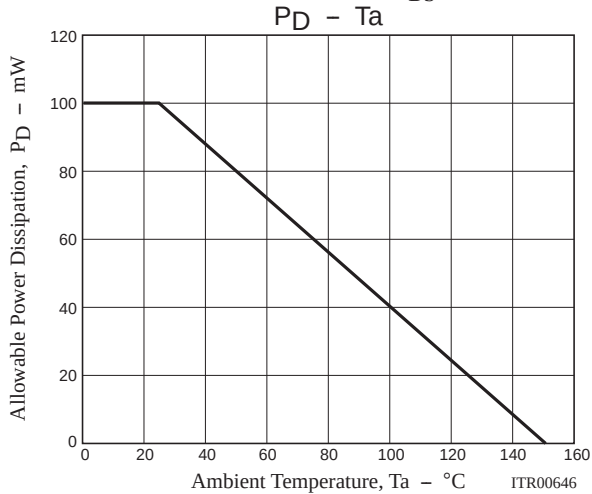
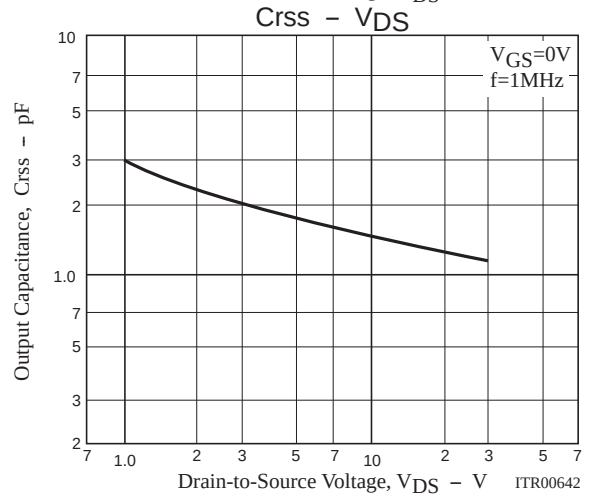
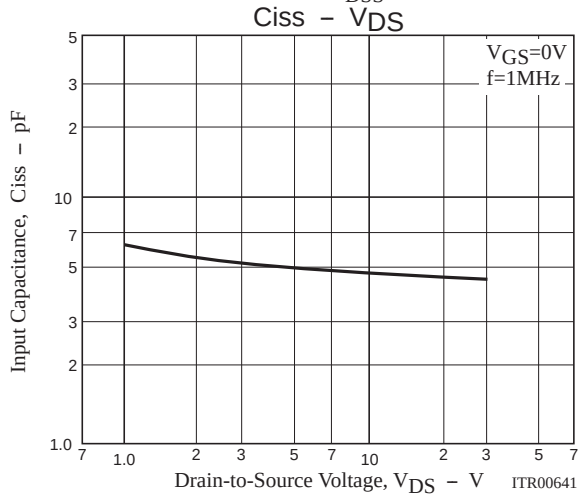
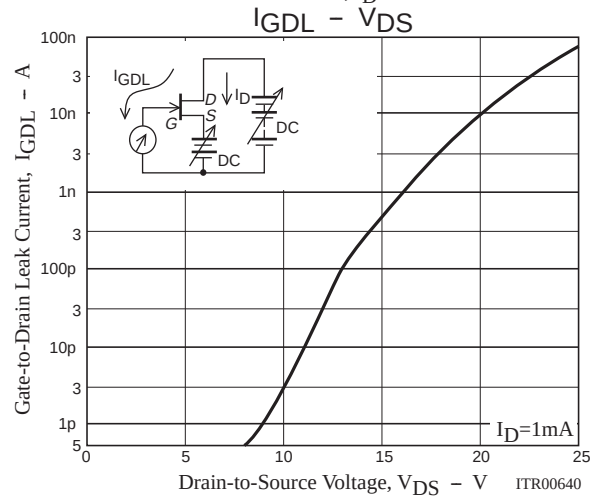
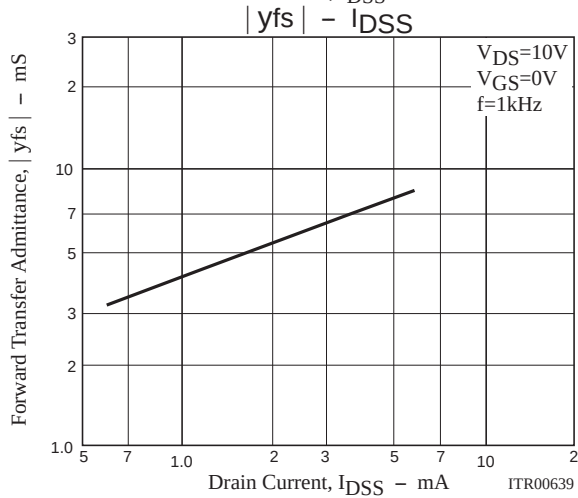
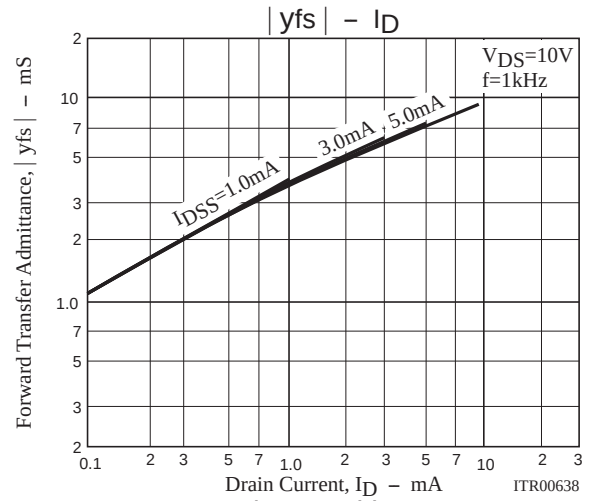
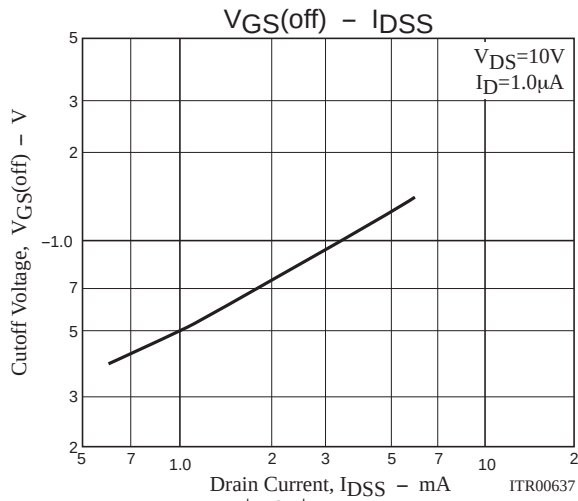
* : The 2SK3796 is classified by I_{DSS} as follows : (unit : mA)

Rank	2	3	4
I _{DSS}	0.6 to 1.5	1.2 to 3.0	2.5 to 6.0

Ordering Information

Device	Package	Shipping	memo
2SK3796-2-TL-E	SMCP	3,000pcs./reel	Pb Free
2SK3796-3-TL-E	SMCP	3,000pcs./reel	
2SK3796-4-TL-E	SMCP	3,000pcs./reel	



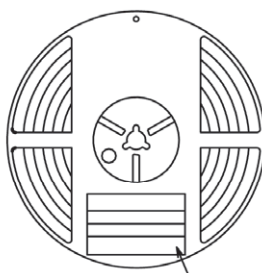


Embossed Taping Specification

2SK3796-2-TL-E, 2SK3796-3-TL-E, 2SK3796-4-TL-E

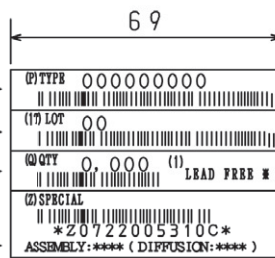
1. Packing Format

Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
SMCP	SMCP	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

Packing method

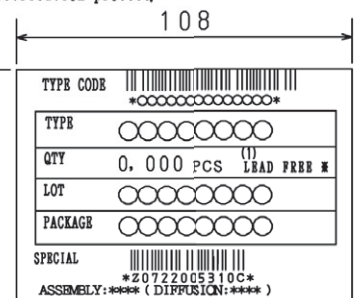
Reel label

Type No.
LOT No.
Quantity
Origin

Reel label, Inner box label
(unit:mm)

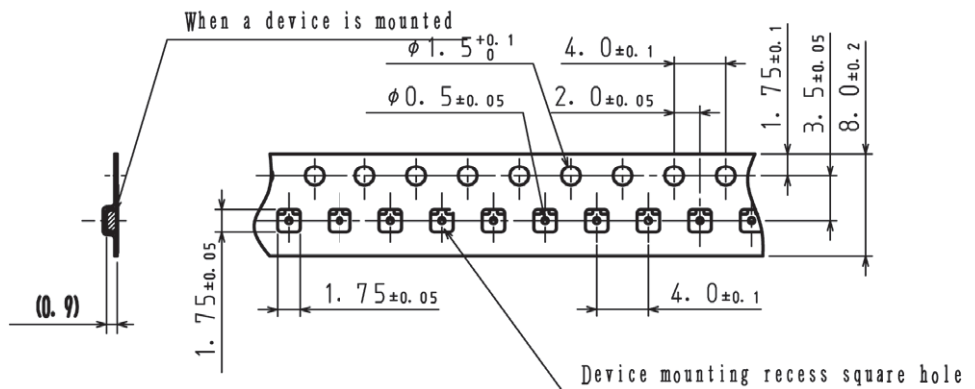
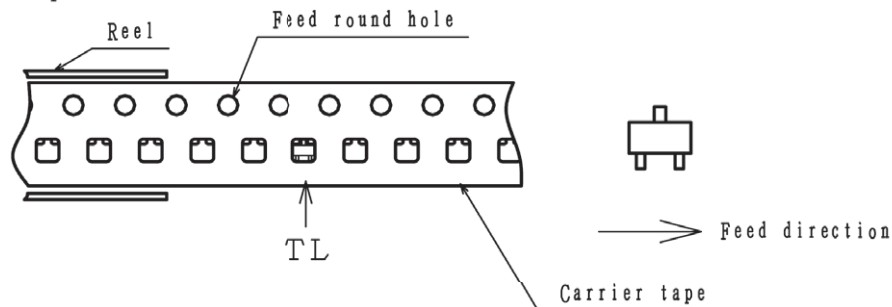
Outer box label

It is a label at the time of factory shipments.
The form of a label may change in physical
distribution process.

**NOTE (1)**

The LEAD FREE * description shows that the surface
treatment of the terminal is lead free.

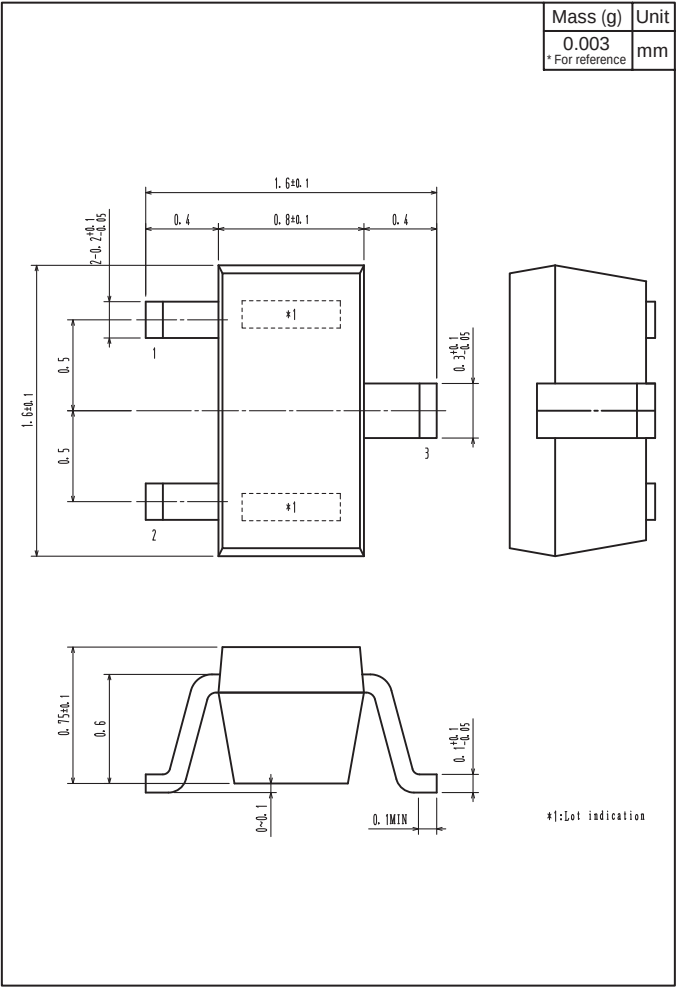
Label	JEITA Phase
.....	JEITA Phase 3

2. Taping configuration**2-1. Carrier tape size (unit:mm)****2-2. Device placement direction**

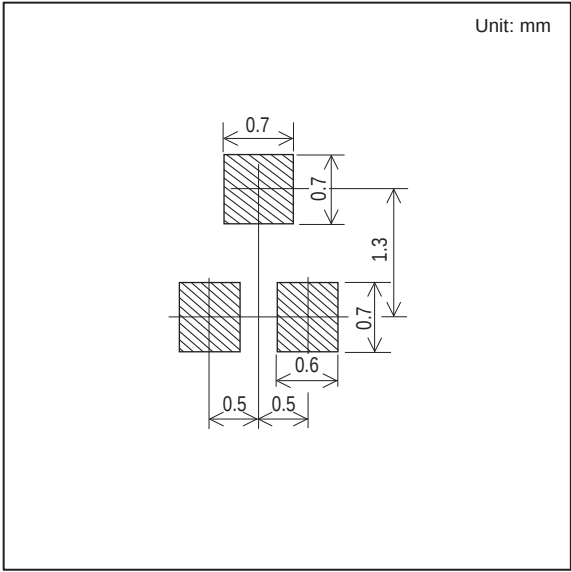
Those with one electrode terminal on the feed hole side.....TL

Outline Drawing

2SK3796-2-TL-E, 2SK3796-3-TL-E, 2SK3796-4-TL-E



Land Pattern Example



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