

## SANYO Semiconductors DATA SHEET

An ON Semiconductor Company

N-Channel Junctin Silicon FET

# **2SK3796** — Low-Frequency General-Purpose Amplifier, Impedance Converter Applications

#### **Applications**

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

#### **Features**

- · Small IGSS
- · Small Ciss

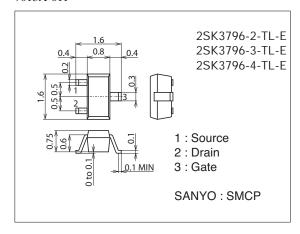
#### **Specifications**

#### 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

#### **Package Dimensions**

unit : mm (typ) 7013A-011

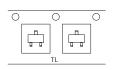


#### **Product & Package Information**

• 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

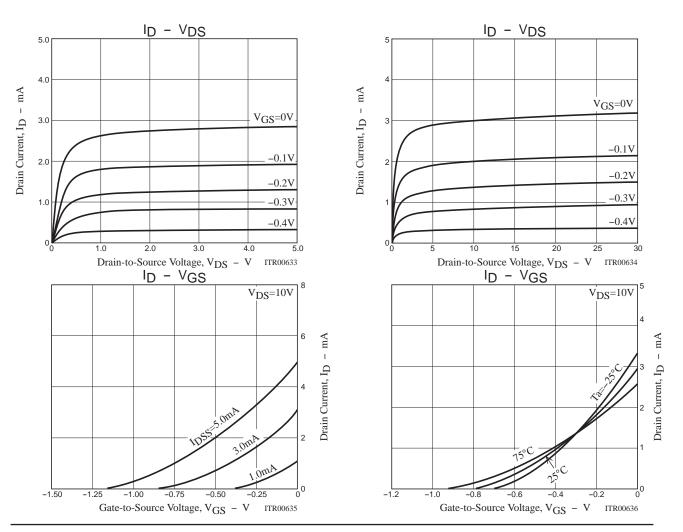
Parameter	Symbol	Conditions	Ratings			Unit	
Parameter	Symbol	Conditions	min	typ	max	Offic	
Gate-to-Drain Breakdown Voltage	V(BR)GDS	IG=-10μA, VDS=0V	-30			V	
Gate Cutoff Current	IGSS	V <sub>GS</sub> =-20V, V <sub>DS</sub> =0V			-1.0	nA	
Cutoff Voltage	V <sub>GS</sub> (off)	V <sub>DS</sub> =10V, I <sub>D</sub> =1μA	-0.18	-0.95	-2.2	V	
Drain Current	IDSS	V <sub>DS</sub> =10V, V <sub>GS</sub> =0V	0.6*		6.0*	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	

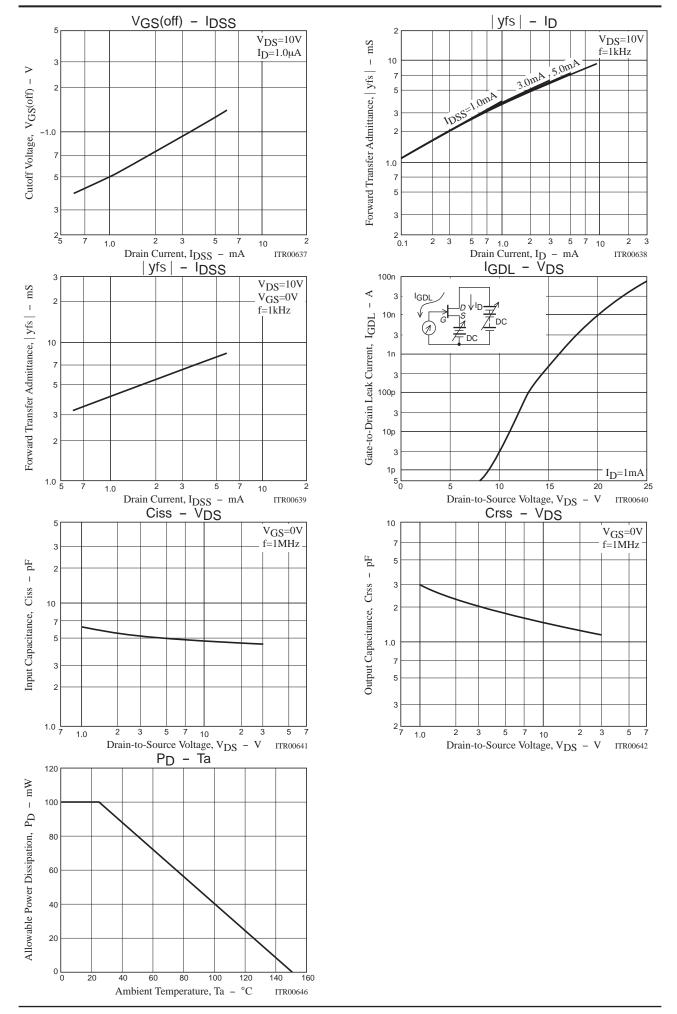
#### \*: The 2SK3796 is classified by IDSS as follows: (unit: mA)

Rank	2	3	4	
IDSS	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	
2SK3796-3-TL-E	SMCP	3,000pcs./reel	Pb Free
2SK3796-4-TL-E	SMCP	3,000pcs./reel	



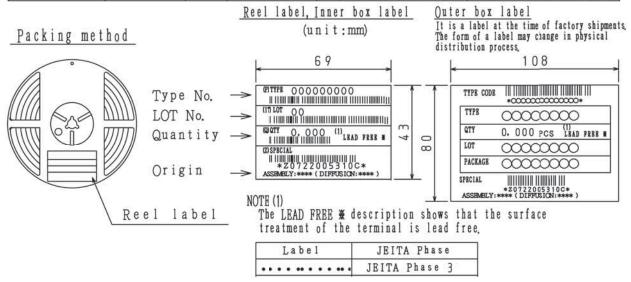


#### **Embossed Taping Specification**

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

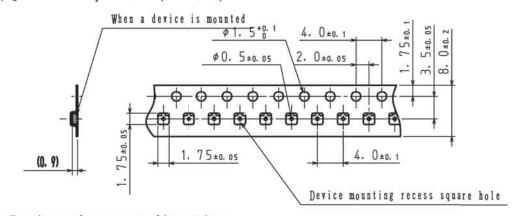
#### 1. Packing Format

Package Name	Carrier Tape	Maximum Number of devices contained (pcs)			Packing format		
	Туре	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)	6 inner boxes contained Dimensions:mm (external)	
		0			183×72×185	440×195×210	

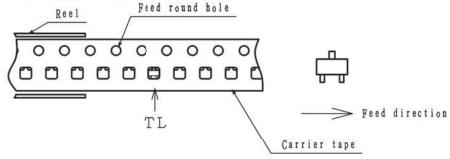


#### 2. Taping configuration

2-1. Carrier tape size (unit:mm)



2-2. Device placement direction



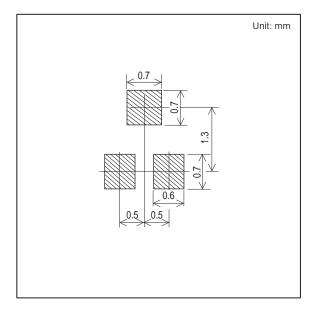
Those with one electrode terminal on the feed hole side.....TL

#### **Outline Drawing**

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

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#### **Land Pattern Example**



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