



SANYO Semiconductors

## DATA SHEET

An ON Semiconductor Company

N-Channel Junction Silicon FET

# 2SK932 — High-Frequency Low-Noise Amplifier Applications

## Applications

- AM tuner RF amplifier, low-noise amplifier

## Features

- Adoption of FBET process
- Large  $|y_{fs}|$
- Small  $C_{iss}$
- Ultralow noise figure
- Ultrasmall-sized package permitting 2SK932-applied sets to be made smaller and slimmer

## Specifications

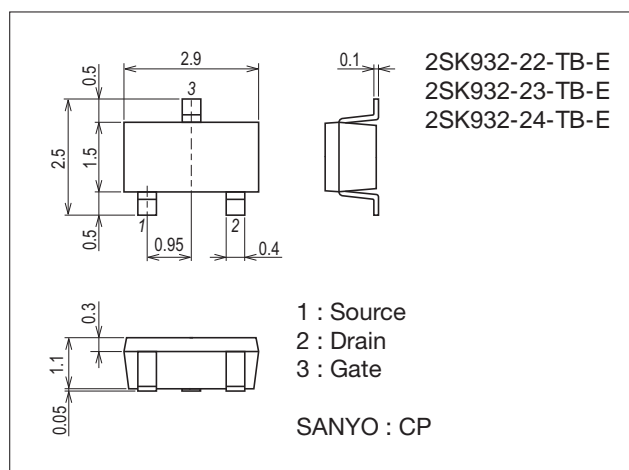
Absolute Maximum Ratings at  $T_a=25^\circ\text{C}$ 

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	$V_{DSX}$		15	V
Gate-to-Drain Voltage	$V_{GDS}$		-15	V
Gate Current	$I_G$		10	mA
Drain Current	$I_D$		50	mA
Allowable Power Dissipation	$P_D$		200	mW
Junction Temperature	$T_j$		150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +150	$^\circ\text{C}$

## Package Dimensions

unit : mm (typ)

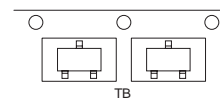
7013A-011



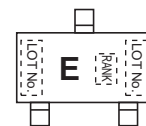
## Product & Package Information

- Package : CP
- JEITA, JEDEC : SC-59, TO-236, SOT-23, TO-236AB
- Minimum Packing Quantity : 3,000 pcs./reel

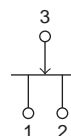
## Packing Type: TB



## Marking



## Electrical Connection



SANYO Semiconductor Co., Ltd.

<http://www.sanyosemi.com/en/network/>

## 2SK932

### Electrical Characteristics at Ta=25°C

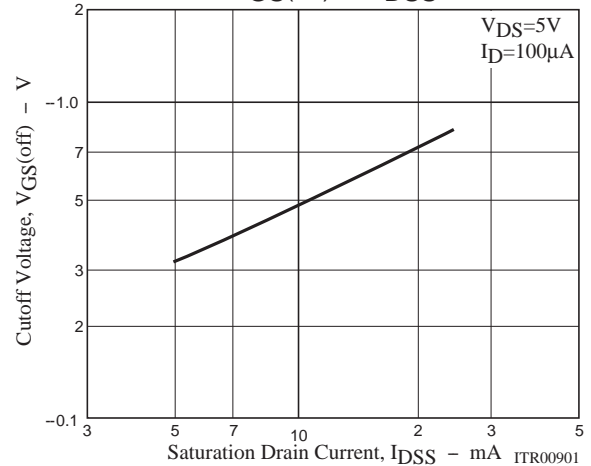
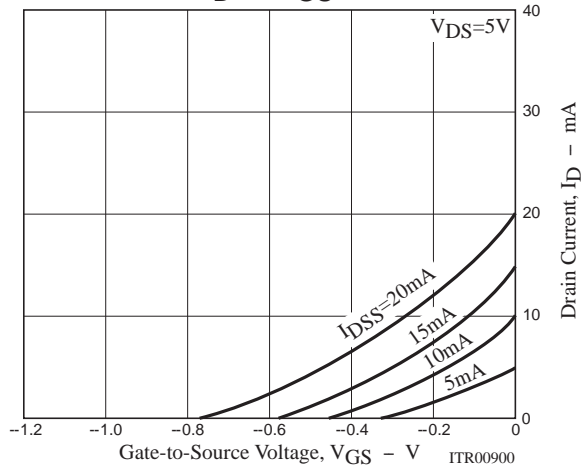
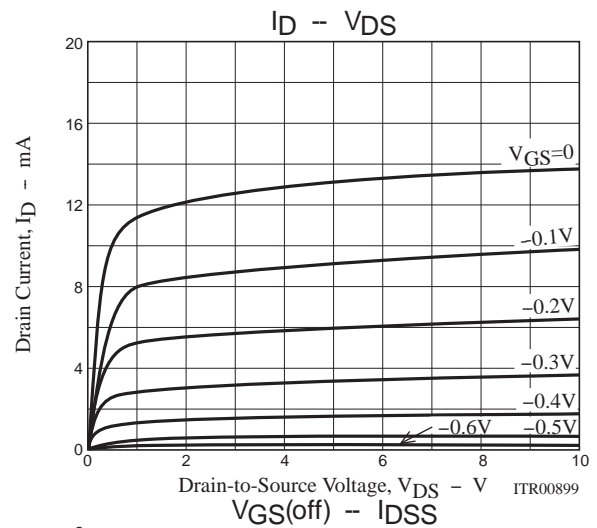
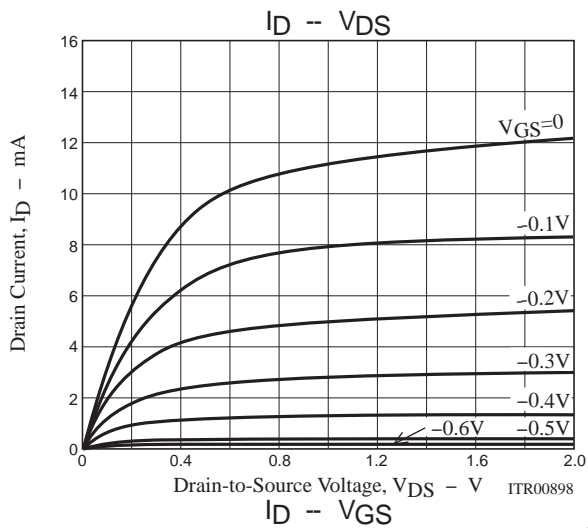
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	$V_{(BR)GDS}$	$I_G = -10\mu A$ , $V_{DS} = 0V$	-15			V
Gate-to-Source Leakage Current	$I_{GSS}$	$V_{GS} = -10V$ , $V_{DS} = 0V$			-1.0	nA
Zero-Gate Voltage Drain Current	$I_{DSS}$	$V_{DS} = 5V$ , $V_{GS} = 0V$	5.0*		24.0*	mA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 5V$ , $I_D = 100\mu A$	-0.2	-0.6	-1.4	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = 5V$ , $V_{GS} = 0V$ , $f = 1kHz$	25	50		mS
Input Capacitance	$C_{iss}$	$V_{DS} = 5V$ , $V_{GS} = 0V$ , $f = 1MHz$		10		pF
Reverse Transfer Capacitance	$C_{rss}$			3.0		pF
Noise Figure	NF	$V_{DS} = 5V$ , $R_g = 1k\Omega$ , $I_D = 1mA$ , $f = 1kHz$		1.5		dB

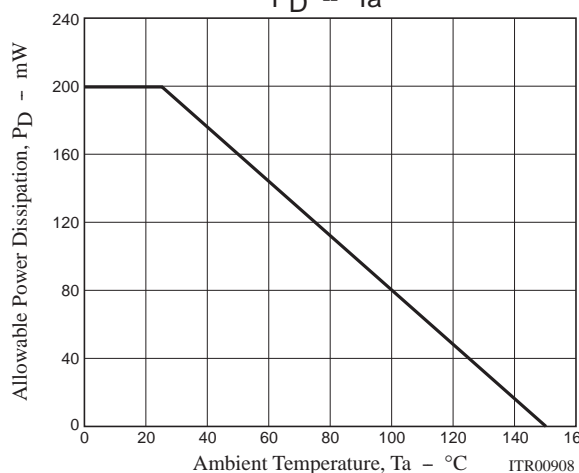
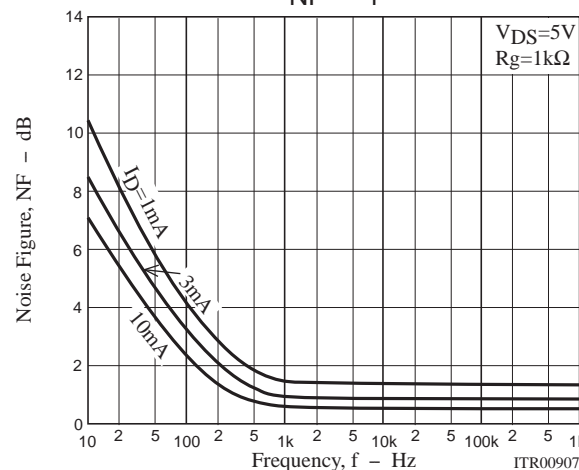
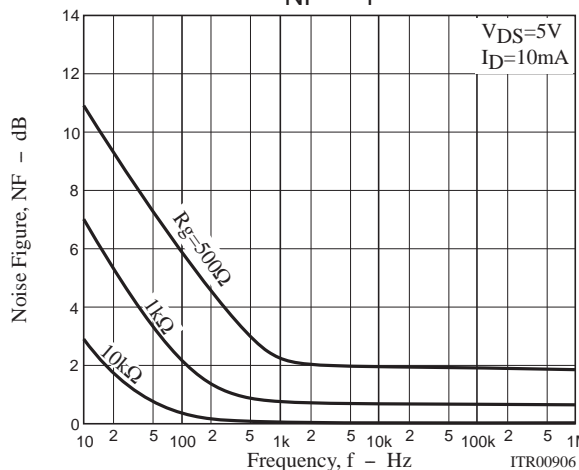
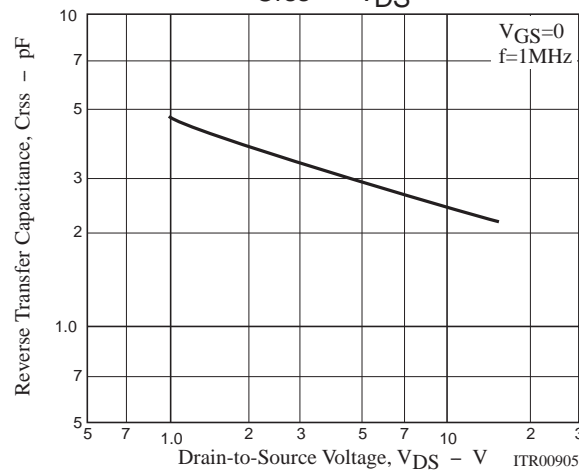
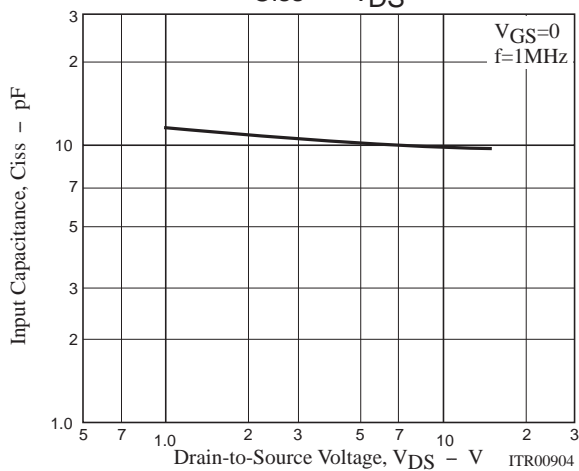
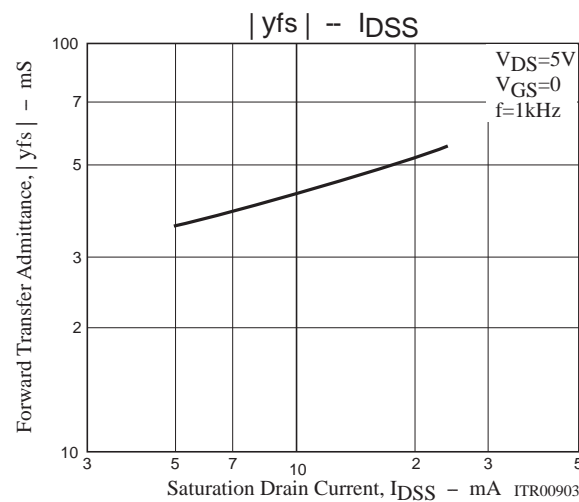
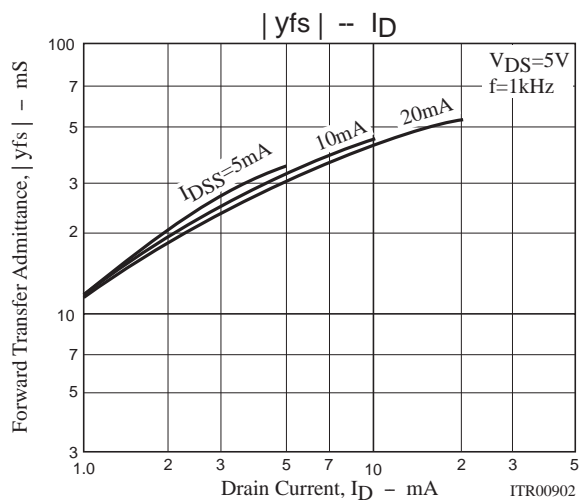
\* : The 2SK932 is classified by  $I_{DSS}$  as follows : (unit : mA)

Rank	21	22	23	24
$I_{DSS}$	5.0 to 8.5	7.3 to 12.0	10.0 to 17.0	14.5 to 24.0

### Ordering Information

Device	Package	Shipping	memo
2SK932-22-TB-E	CP	3,000pcs./reel	Pb Free
2SK932-23-TB-E	CP	3,000pcs./reel	
2SK932-24-TB-E	CP	3,000pcs./reel	





**Embossed Taping Specification**

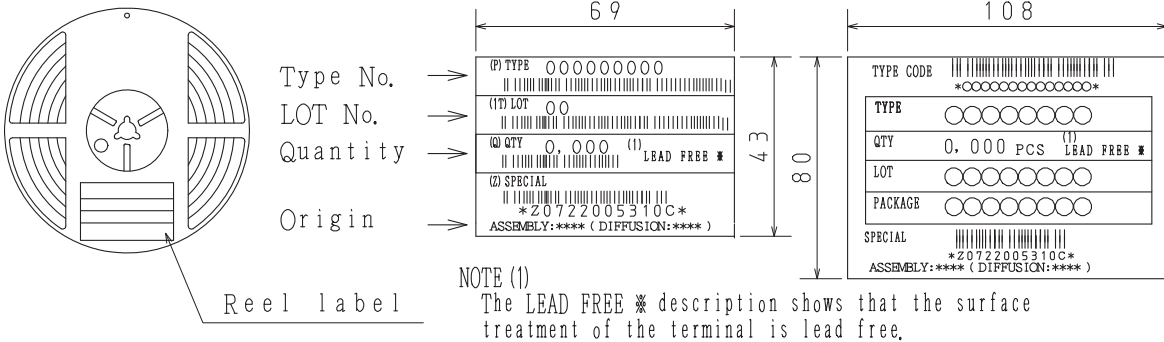
2SK932-22-TB-E, 2SK932-23-TB-E, 2SK932-24-TB-E

**1. Packing Format**

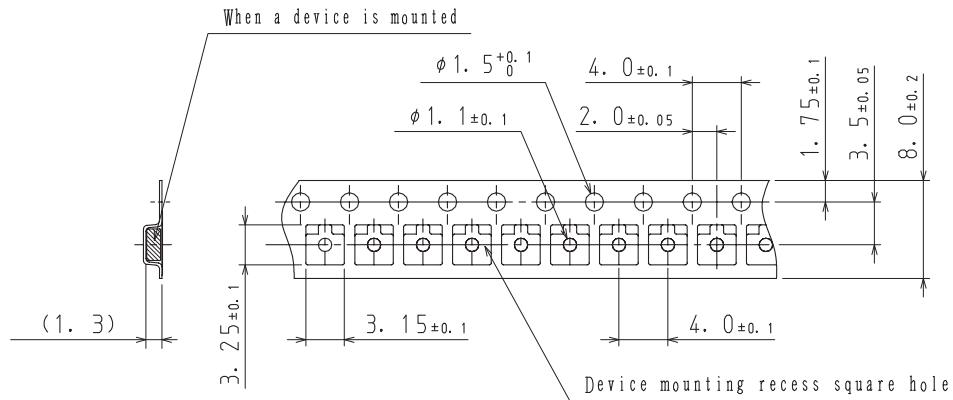
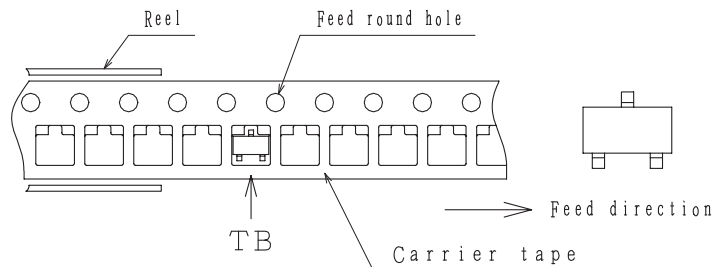
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
CP	CP	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

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.**Packing method**

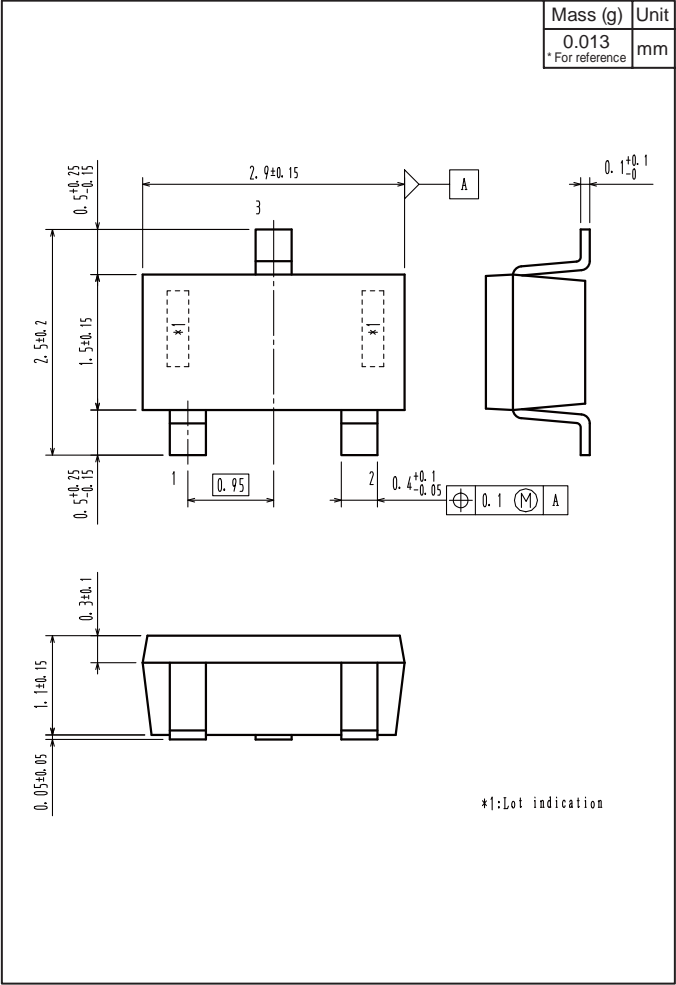
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

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

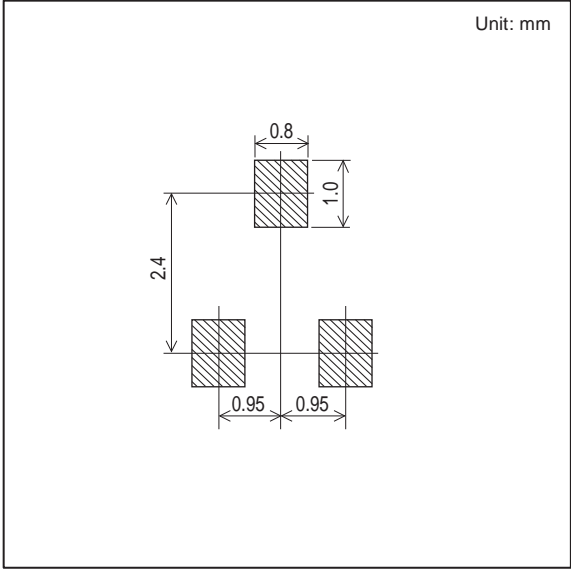
Those with one electrode terminal on the feed hole side.....TB

Outline Drawing

2SK932-22-TB-E, 2SK932-23-TB-E, 2SK932-24-TB-E



Land Pattern Example



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