Ordering number : EN2841A

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 | yfs |
- Small Ciss
- Ultralow noise figure
- Ultrasmall-sized package permitting 2SK932-applied sets to be made smaller and slimmer

Specifications

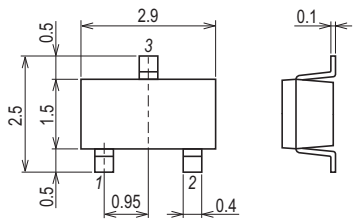
Absolute Maximum Ratings at Ta=25°C

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	Tj		150	°C
Storage Temperature	Tstg		−55 to +150	°C

Package Dimensions

unit : mm (typ)

7013A-011



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

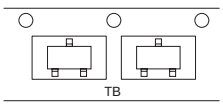
1 : Source
2 : Drain
3 : Gate

SANYO : CP

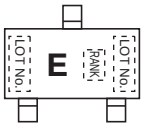
Product & Package Information

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

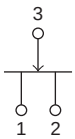
Packing Type: TB



Marking



Electrical Connection



Electrical Characteristics at Ta=25°C

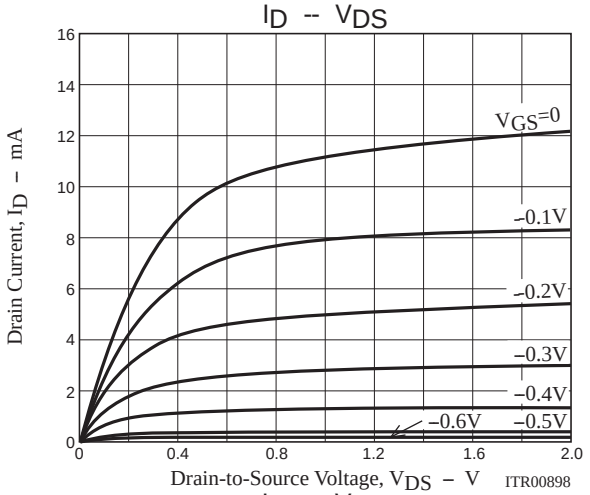
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	$V_{(BR)GDS}$	I_G=−10μA, V_{DS}=0V	−15			V
Gate-to-Source Leakage Current	I_{GSS}	V_{GS}=−10V, V_{DS}=0V			−1.0	nA
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=5V, V_{GS}=0V	5.0*		24.0*	mA
Cutoff Voltage	V_{GS}(off)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

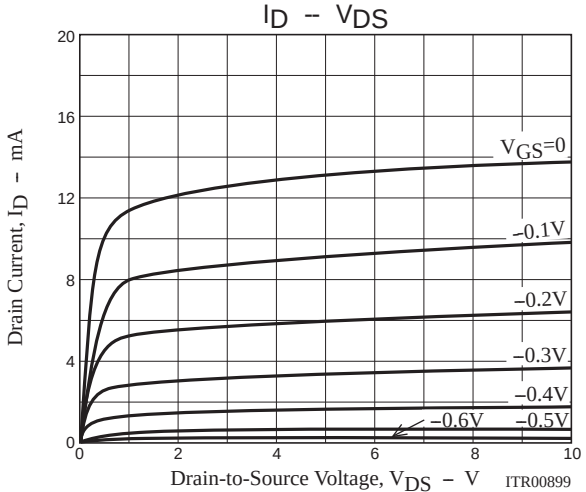
* : The 2SK932 is classified by I_{DSS} as follows : (unit : mA)

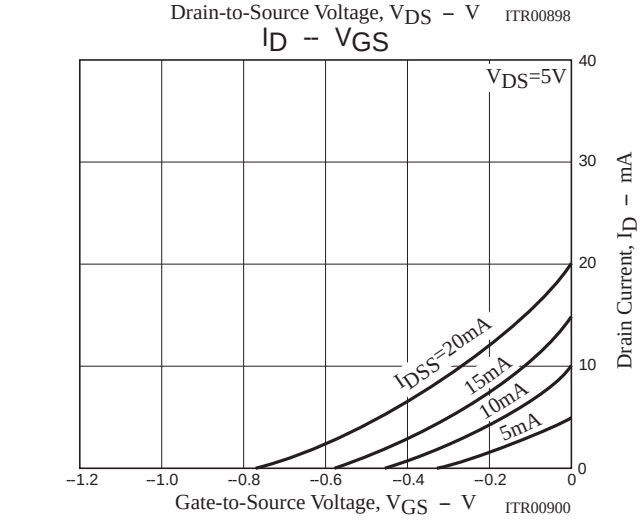
Rank	21	22	23	24
I_{DSS}	5.0 to 8.5	7.3 to 12.0	10.0 to 17.0	14.5 to 24.0

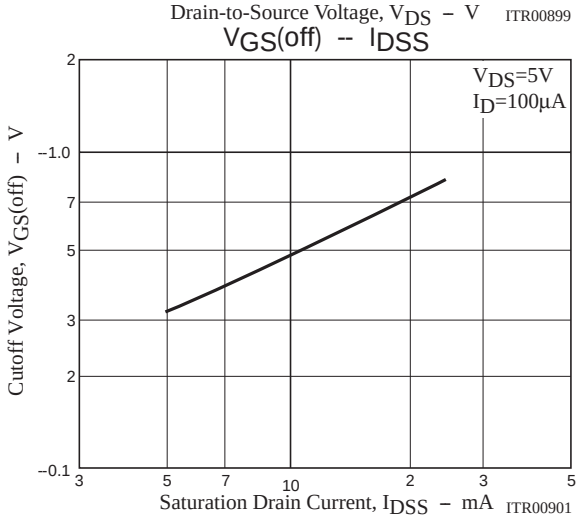
Ordering Information

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	

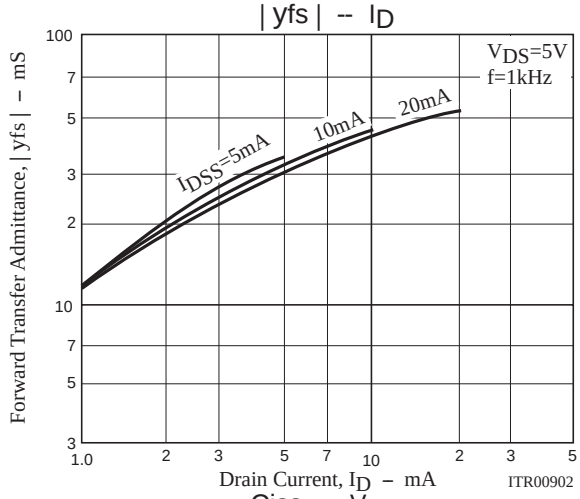




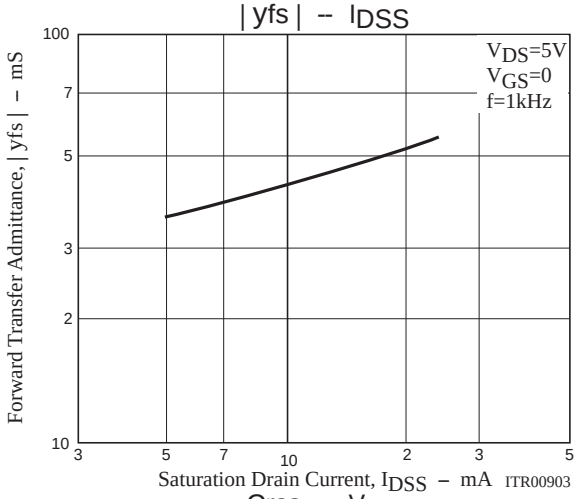




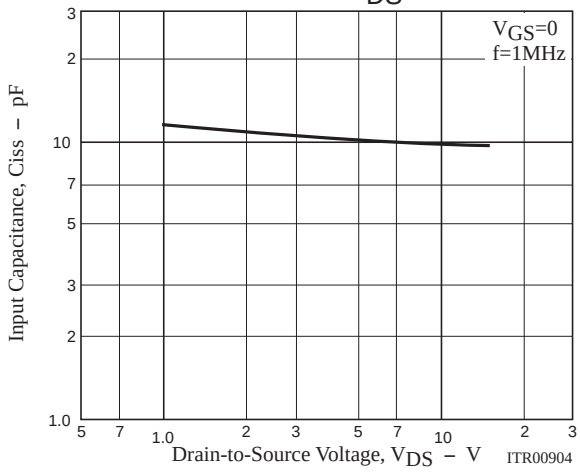
| yfs | -- I_D



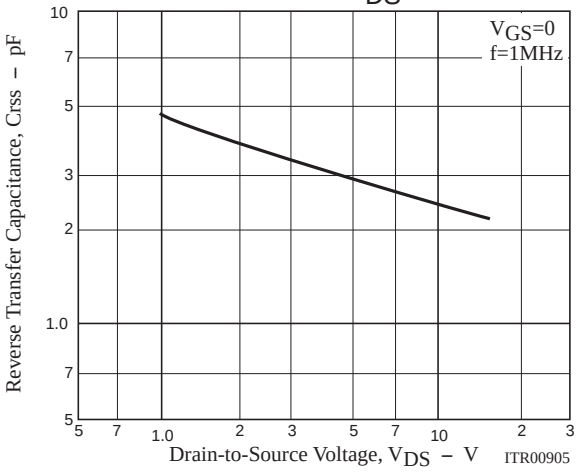
| yfs | -- I_{DSS}



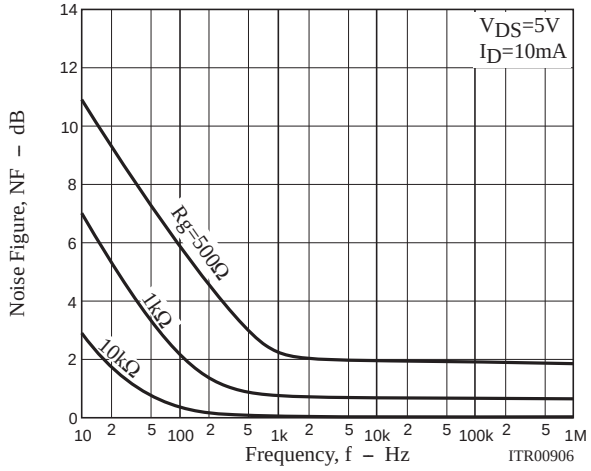
Ciss -- V_{DS}



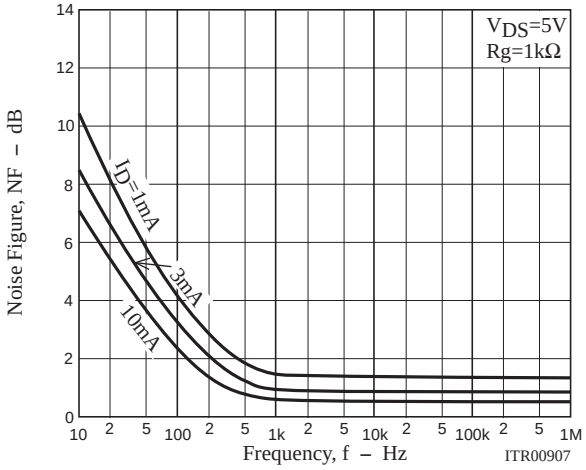
Crss -- V_{DS}



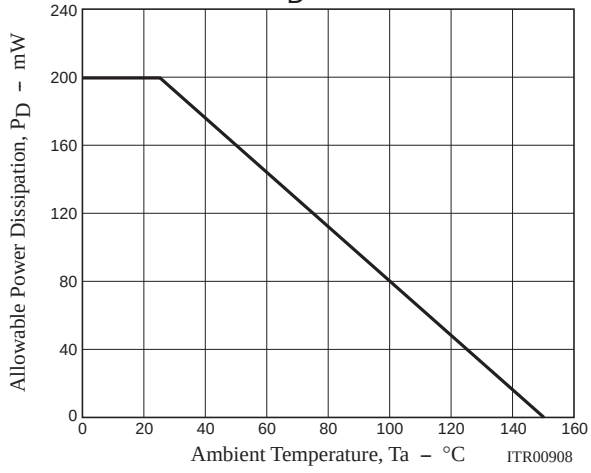
NF -- f



NF -- f



P_D -- Ta



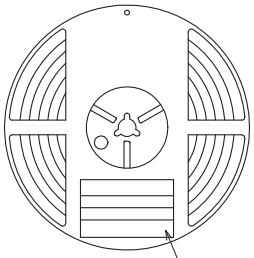
Embossed Taping Specification

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

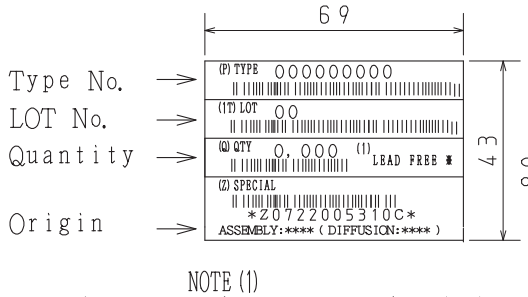
Packing method



Reel label

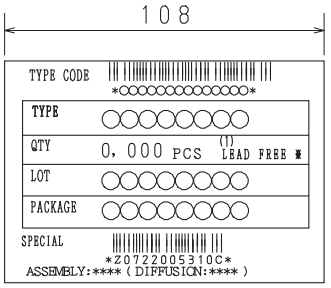
Reel label, Inner box label

(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.

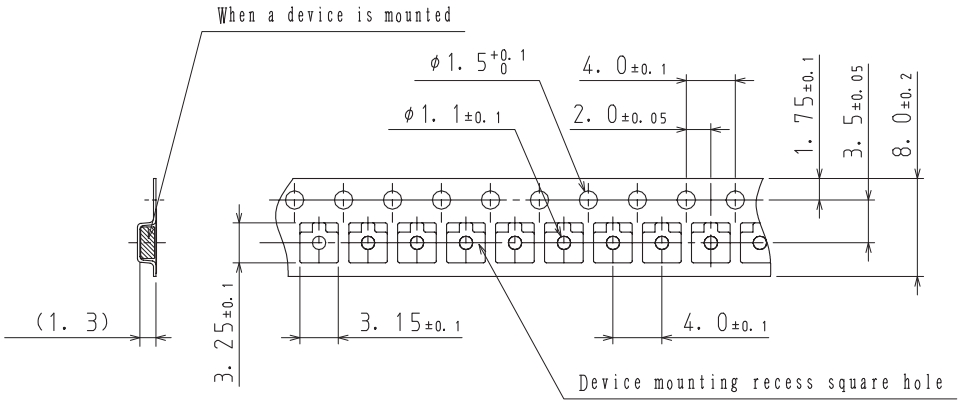


NOTE (1)
The LEAD FREE ※ description shows that the surface treatment of the terminal is lead free.

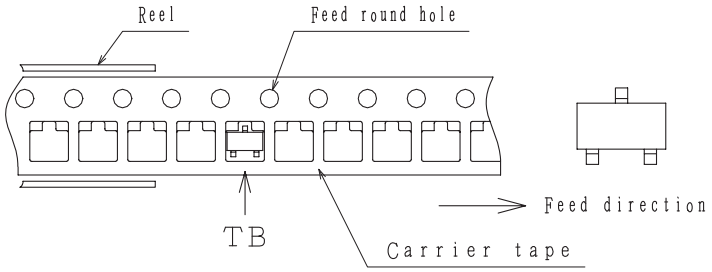
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



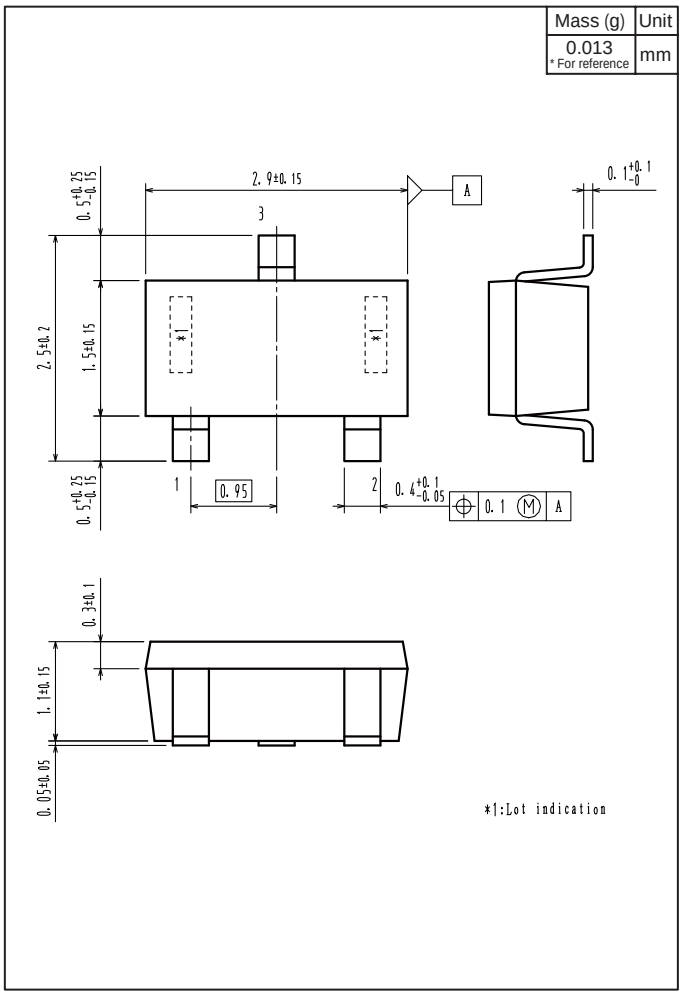
2-2. Device placement direction



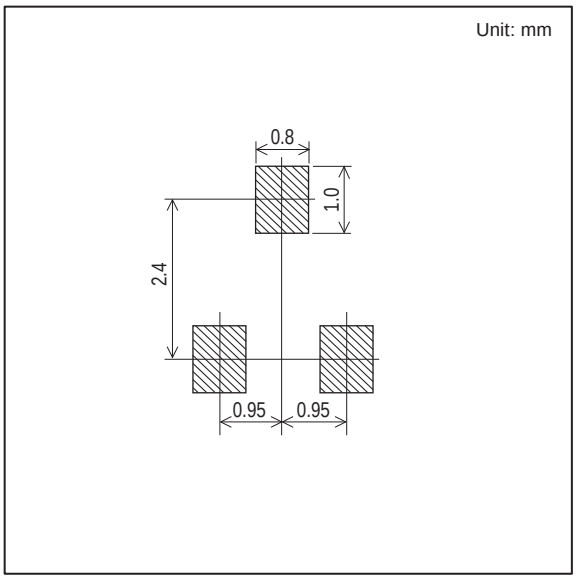
Those with one electrode terminal on the feed hole side·····TB

Outline Drawing

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



Land Pattern Example



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