2SK932

N-Channel JFET 15V, 7.3 to 24mA, 50mS, CP



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 | VGDS | | -15 | V |
| Gate Current | IG | | 10 | mA |
| Drain Current | ID | | 50 | mA |
| Allowable Power Dissipation | PD | | 200 | mW |
| Junction Temperature | Tj | | 150 | °C |
| Storage Temperature | Tstg | | -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 : CP

• Package

• JEITA, JEDEC

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

Packing Type: TB

Marking





Electrical Connection



ORDERING INFORMATION

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

Electrical Characteristics at Ta=25°C

| Parameter | Cumphiel | Conditions | Ratings | | | Unit |
|---------------------------------|-----------------------|--|---------|------|-------|------|
| | Symbol | Conditions | min | typ | max | Unit |
| Gate-to-Drain Breakdown Voltage | V(BR)GDS | IG=-10μA, VDS=0V | -15 | | | V |
| Gate-to-Source Leakage Current | IGSS | V _{GS} =-10V, V _{DS} =0V | | | -1.0 | nA |
| Zero-Gate Voltage Drain Current | IDSS | V _{DS} =-5V, V _{GS} =0V | 7.3* | | 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 | | | 10 | | pF |
| Reverse Transfer Capacitance | Crss | V _{DS} =5V, V _{GS} =0V, f=1MHz | | 3.0 | | pF |
| Noise Figure | NF | $V_{DS}=5V, R_g=1k\Omega, I_D=1mA, f=1kHz$ | | 1.5 | | dB |

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 2SK932 is classified by IDSS as follows : (unit : mA)

| Rank | 22 | 23 | 24 | |
|------|-------------|--------------|--------------|--|
| IDSS | 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 | |
| 2SK932-23-TB-E | CP | 3,000pcs./reel | Pb Free |
| 2SK932-24-TB-E | CP | 3,000pcs./reel | |







Outline Drawing

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



Land Pattern Example



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