Monolithic N-Channel JFET Duals

SST404 U401 U406
SST406 U404

PRODUCT SUMMARY					
Part Number	**$V_{GS(off)}$ (V)**	**$V_{(BR)GSS}$ Min (V)**	**g_{fs} Min (mS)**	**I_G Typ (pA)**	**$\|V_{GS1} - V_{GS2}\|$ Max (mV)**
U401	–0.5 to –2.5	–40	1	–2	5
SST/U404	–0.5 to –2.5	–40	1	–2	15
SST/U406	–0.5 to –2.5	–40	1	–2	40

FEATURES

- Monolithic Design
- High Slew Rate
- Low Offset/Drift Voltage
- Low Gate Leakage: 2 pA
- Low Noise
- High CMRR: 102 dB

BENEFITS

- Tight Differential Match vs. Current
- Improved Op Amp Speed, Settling Time Accuracy
- Minimum Input Error/Trimming Requirement
- Insignificant Signal Loss/Error Voltage
- High System Sensitivity
- Minimum Error with Large Input Signal

APPLICATIONS

- Wideband Differential Amps
- High-Speed,Temp-Compensated, Single-Ended Input Amps
- High-Speed Comparators
- Impedance Converters

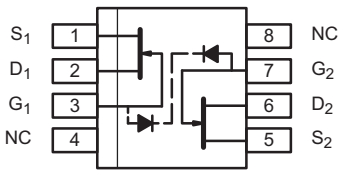
DESCRIPTION

The SST/U401 series of high-performance monolithic dual JFETs features extremely low noise, tight offset voltage and low drift over temperature specifications, and is targeted for use in a wide range of precision instrumentation applications. This series has a wide selection of offset and drift specifications with the U401 featuring a 5-mV offset and 10-μV/°C drift.

The U series, hermetically sealed TO-71 package is available with full military processing (see Military Information). The SST series SO-8 package provides ease of manufacturing, and the symmetrical pinout prevents improper orientation. The SO-8 package is available with tape-and-reel options for compatibility with automatic assembly methods (see Packaging Information).

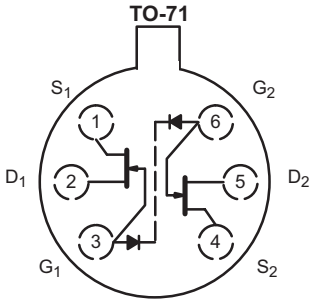
For similar high-gain products in TO-78 packaging, see the 2N5911/5912 data sheet.

Narrow Body SOIC



Top View
SST404, SST406

TO-71



Top View
U401, U404, U406

ABSOLUTE MAXIMUM RATINGS

Gate-Drain, Gate-Source Voltage . . . . . –40 V
Gate Current . . . . . 10 mA
Lead Temperature ($^1/_{16}$" from case for 10 sec.) . . . . . 300°C
Storage Temperature : U Prefix . . . . . –65 to 200°C
SST Prefix . . . . . –55 to 150°C

Operating Junction Temperature . . . . . –55 to 150°C
Power Dissipation : Per Side[a] . . . . . 300 mW
Total[b] . . . . . 500 mW

Notes
a. Derate 2.4 mW/°C above 25°C
b. Derate 4 mW/°C above 25°C

For applications information see AN106.