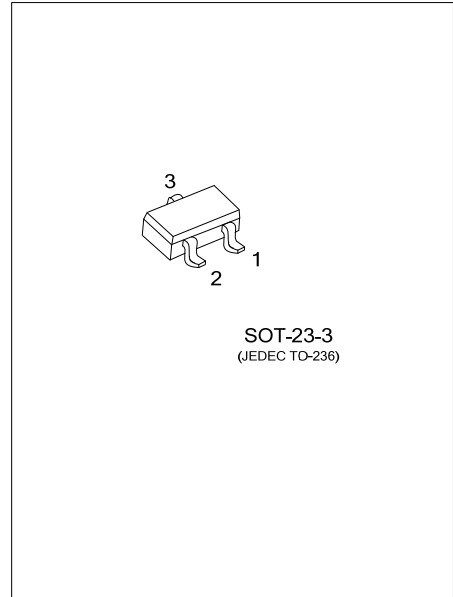




LOW-FREQUENCY GENERAL-PURPOSE AMPLIFIER APPLICATIONS



FEATURES

- * Ideal For Potentiometers
- * Analog Switches
- * Low Frequency Amplifiers
- * Constant Current Supplies
- * Impedance Conversion

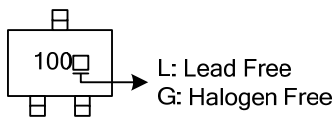
ORDERING INFORMATION

| Ordering Number | | Package | Pin Assignment | | | Packing |
|-----------------|---------------|----------|----------------|---|---|-----------|
| Lead Free | Halogen Free | | 1 | 2 | 3 | |
| UJ0100L-AE2-R | UJ0100G-AE2-R | SOT-23-3 | D | S | G | Tape Reel |

Note: Pin Assignment: G: Gate D: Drain S: Source

| | |
|------------------------|--|
| <p>UJ0100L-x-AE2-R</p> | <p>(1) R: Tape Reel</p> <p>(2) AE2: SOT-23-3</p> <p>(3) x: Refer to Classification of I_{DSS}</p> <p>(4) G: Halogen Free, L: Lead Free</p> |
|------------------------|--|

MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$, unless otherwise specified)

| PARAMETER | SYMBOL | RATINGS | UNIT |
|-------------------------|-----------|------------|------------------|
| Drain to Source Voltage | V_{DSS} | 30 | V |
| Gate to Source Voltage | V_{GSS} | -30 | V |
| Gate Current | I_G | 10 | mA |
| Drain Current | I_D | 20 | mA |
| Power Dissipation | P_D | 200 | mW |
| Junction Temperature | T_J | 150 | $^\circ\text{C}$ |
| Storage Temperature | T_{STG} | -55 ~ +150 | $^\circ\text{C}$ |

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$, unless otherwise specified)

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|----------------------------------|---------------|--|-----|-----|------|----------|
| OFF CHARACTERISTICS | | | | | | |
| Gate to Drain Breakdown Voltage | BV_{GDS} | $I_G = -10\mu\text{A}$ | -30 | | | V |
| Drain-Source Leakage Current | I_{DSS} | $V_{DS} = 10\text{V}, V_{GS} = 0\text{V}$ | 0.6 | | 2.5 | mA |
| Gate-Source Leakage Current | I_{GSS} | $V_{GS} = -20\text{V}$ | | | -1.0 | nA |
| ON CHARACTERISTICS | | | | | | |
| Gate Cutoff Voltage | $V_{GS(OFF)}$ | $V_{DS} = 10\text{V}, I_D = 1\mu\text{A}$ | | -1 | -4 | V |
| Drain-Source On-State Resistance | $R_{DS(ON)}$ | $V_{DS} = 10\text{mV}, V_{GS} = 0\text{V}$ | | 250 | | Ω |
| Forward Transfer Admittance | $ Y_{FS} $ | $V_{DS} = 10\text{V}, V_{GS} = 0\text{V}, f = 1\text{MHz}$ | 2.5 | 6.0 | | mS |
| DYNAMIC PARAMETERS | | | | | | |
| Input Capacitance | C_{ISS} | $V_{DS} = 10\text{V}, V_{GS} = 0\text{V}, f = 1\text{MHz}$ | | 5 | | pF |
| Reverse Transfer Capacitance | C_{RSS} | | | 1.5 | | pF |

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