

UTC UNISONIC TECHNOLOGIES CO., LTD

2SKTJ04

Preliminary

JFET

2

SOT-723

SOT-23S (EIAJ SC-59)

TSOT-723

FIELD EFFECT TRANSISTOR **SILICON N-CHANNEL JUNCTION TYPE**

DESCRIPTION

The UTC 2SKTJ04 is an N-channel junction silicon FET, it uses UTC's advanced technology to provide the customers with low IGSS and low CRSS.

The UTC 2SKTJ04 is suitable for audio frequency low noise amplifier, impedance conversion, infrared sensor applications.

FEATURES

* Breakdown voltage: V_{DGO}=20V

ORDERING INFORMATION

| Ordering | Number | Deekene | Pin Assignment | | | Deaking | |
|--|-------------------|----------|----------------|---|---|-----------|--|
| Lead Free | Halogen Free | Package | 1 | 2 | 3 | Packing | |
| 2SKTJ04L-x-AE3S-R | 2SKTJ04G-x-AE3S-R | SOT-23S | D | S | G | Tape Reel | |
| 2SKTJ04L-x-AH7-R | 2SKTJ04G-x-AH7-R | TSOT-723 | D | S | G | Tape Reel | |
| 2SKTJ04L-x-AQ3-R | 2SKTJ04G-x-AQ3-R | SOT-723 | D | S | G | Tape Reel | |
| Note: Pin Assignment: D: Drain S: Source G: Gate | | | | | | | |

| 2SKTJ04G-x-AE3S-R | | | |
|-------------------|------------------|---|--|
| | (1)Packing Type | (1) R: Tape Reel | |
| | (2)Package Type | (2) AE3S: SOT-23S, AH7: TSOT-723, AQ3: SOT-723 | |
| | (3)Rank | (3) x: refer to CLASSIFICATION OF IDSS | |
| | (4)Green Package | (4) G: Halogen Free and Lead Free, L: Lead Free | |
| | | | |

MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

| PARAMETER | SYMBOL | RATINGS | UNIT |
|----------------------------------|------------------|------------|------|
| Drain-Source Voltage (Gate Open) | V _{DSO} | 20 | V |
| Drain-Gate Voltage (Source Open) | V _{DGO} | 20 | V |
| Drain-Source Current (Gate Open) | I _{DSO} | 2 | mA |
| Drain-Gate Current (Source Open) | I _{DGO} | 2 | mA |
| Power Dissipation | PD | 100 | mW |
| Operating Ambient temperature | T _{OPR} | -20 ~ +80 | °C |
| Storage Temperature Range | T _{STG} | -55 ~ +125 | °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°C, unless otherwise specified)

| PARAMETER | SYMBOL | TEST CONDITIONS | | MIN | TYP | MAX | UNIT |
|------------------------------|--------|--|-----------|-----|-----|-----|------|
| Drain Current (Note 1) | lo | | 2SKTJ04-S | 100 | | 220 | μA |
| | | $V_{DD}=2.0V,$ $R_{D}=2.2k\Omega\pm1\%$ | 2SKTJ04-T | 180 | | 320 | μA |
| | | | 2SKTJ04-U | 280 | | 470 | μA |
| Drain-Source Leakage Current | IDSS | V _{DD} =2.0V, R _D =2.2kΩ±1%, V _{GS} =0V | | 110 | | 460 | μA |
| Forward Transfer Admittance | yfs | V _{DS} =2.0V, V _{GS} =0V, f=1kHz | | 660 | | | μS |

Notes: 1. A protection diode is built-in between gate and source of transistor. However if forward current flows between gate and source transistor might be damaged. So please be careful not insert reverse.

2. I_D is assured for I_{DSS}.

CLASSIFICATION OF IDSS

| RANK | S | Т | U |
|-------|-----------|-----------|-----------|
| RANGE | 110 ~ 210 | 190 ~ 310 | 290 ~ 460 |



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