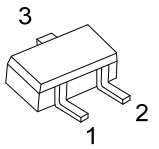
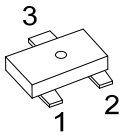
2SKTJ04

JFET

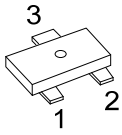
FIELD EFFECT TRANSISTOR
SILICON N-CHANNEL
JUNCTION TYPE



SOT-23S
(EIAJ SC-59)



SOT-723



TSOT-723

■ DESCRIPTION

The UTC **2SKTJ04** is an N-channel junction silicon FET, it uses UTC's advanced technology to provide the customers with low I_{GSS} and low C_{RSS}.

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		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
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

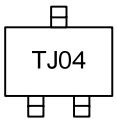
Note: Pin Assignment: D: Drain S: Source G: Gate

2SKTJ04G-x-AE3S-R

(1)Packing Type
(2)Package Type
(3)Rank
(4)Green Package

(1) R: Tape Reel
(2) AE3S: SOT-23S, AH7: TSOT-723, AQ3: SOT-723
(3) x: refer to CLASSIFICATION OF I_{DSS}
(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	P_D	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)	I_D	V_{DD}=2.0V, R_D=2.2kΩ±1%	2SKTJ04-S	100		220	μA
			2SKTJ04-T	180		320	μA
			2SKTJ04-U	280		470	μA
Drain-Source Leakage Current	I_{DSS}	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
Output Noise Voltage	V_{NO}	V_{DD} = 2V, C_g = 5pF, A-curve filter, R_L = 2.2kΩ			-102		dB
Voltage gain	G_V	V_{DD} = 2V , R_L = 2.2kΩ, C_g = 5pF, f = 1kHz, Vin = 10mV			-1.0		dB

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 I_{DSS}

RANK	S	T	U
RANGE	110 ~ 210	190 ~ 310	290 ~ 460