



FIELD EFFECT TRANSISTOR SILICON N-CHANNEL JUNCTION TYPE

DESCRIPTION

The UTC **2SK3J02** is an N-channel junction silicon FET, it uses UTC's advanced technology to provide the customers with low I_{DSS} and low C_{RSS} .

The UTC **2SK3J02** is suitable for audio frequency low noise amplifier, impedance conversion, infrared sensor applications.

FEATURES

* Breakdown voltage: $V_{DGO}=20V$

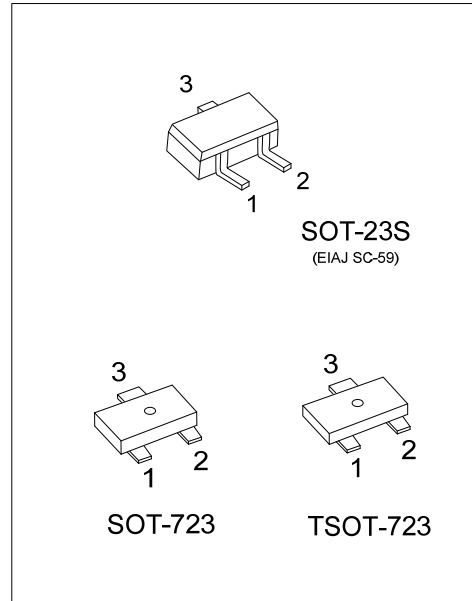
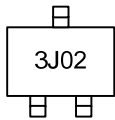
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SK3J02L-x-AE3S-R	2SK3J02G-x-AE3S-R	SOT-23S	D	S	G	Tape Reel
2SK3J02L-x-AH7-R	2SK3J02G-x-AH7-R	TSOT-723	D	S	G	Tape Reel
2SK3J02L-x-AQ3-R	2SK3J02G-x-AQ3-R	SOT-723	D	S	G	Tape Reel

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

<p>2SK3J02G-x-AE3S-R</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Rank (4) Green Package 	<ul style="list-style-type: none"> (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
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MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$, 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	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +125	$^{\circ}\text{C}$

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	
Drain Current (Note 1)	I_D	$V_{DD}=2.0\text{V}$, $R_D=2.2\text{k}\Omega\pm 1\%$	2SK3J02-S	100		220	μA
			2SK3J02-T	180		320	μA
			2SK3J02-U	280		470	μA
Drain-Source Leakage Current	I_{DSS}	$V_{DD}=2.0\text{V}$, $R_D=2.2\text{k}\Omega\pm 1\%$, $V_{GS}=0\text{V}$	110		460	μA	
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=2.0\text{V}$, $V_{GS}=0\text{V}$, $f=1\text{kHz}$	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 I_{DSS}

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

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