



2SK303

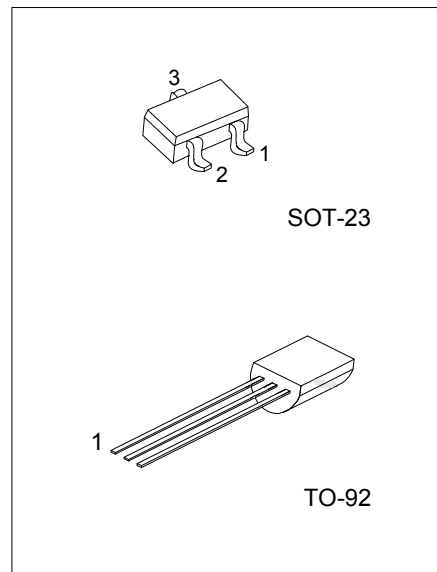
Preliminary

JFET

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	
2SK303L-x-AE3-R	2SK303G-x-AE3-R	SOT-23	D	S	G	Tape Reel
2SK303L-x-T92-B	2SK303G-x-T92-B	TO-92	G	S	D	Tape Box
2SK303L-x-T92-K	2SK303G-x-T92-K	TO-92	G	S	D	Bulk
2SK303L-x-T92-R	2SK303G-x-T92-R	TO-92	G	S	D	Tape Reel

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

2SK303L-x-AE3-R (1)Packing Type (2)Package Type (3)Rank (4)Lead Free	(1) B: Tape Box, K: Bulk, R: Tape Reel (2) AE3: SOT-23, T92: TO-92 (3) x: Refer to Classification of I_{DSS} (4) G: Halogen Free, L: Lead Free
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■ MARKING

2SK303-V2	2SK303-V3	2SK303-V4	2SK303-V5
L: Lead Free G: Halogen Free	L: Lead Free G: Halogen Free	L: Lead Free G: Halogen Free	L: Lead Free G: Halogen Free

■ 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	SOT-23	P_D	200	mW
	TO-92		625	
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		12.0	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

■ CLASSIFICATION OF I_{DSS}

RANK	V2	V3	V4	V5
I_{DSS} (mA)	0.6 ~ 1.5	1.2 ~ 3.0	2.5 ~ 6.0	5.0 ~ 12.0

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