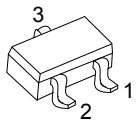
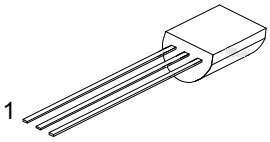
2SK303

Preliminary ***JFET***

LOW-FREQUENCY GENERAL-PURPOSE AMPLIFIER APPLICATIONS



SOT-23



TO-92

■ 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

■ MARKING

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

■ ABSOLUTE MAXIMUM RATINGS (T_A =25°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	°C
Storage Temperature		T_{STG}	-55 ~ +150	°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
OFF CHARACTERISTICS						
Gate to Drain Breakdown Voltage	BV_{GDS}	I_G=-10μA	-30			V
Drain-Source Leakage Current	I_{DSS}	V_{DS}=10V,V_{GS}=0V	0.6		12.0	mA
Gate-Source Leakage Current	I_{GSS}	V_{GS}=-20V			-1.0	nA
ON CHARACTERISTICS						
Gate Cutoff Voltage	$V_{GS(OFF)}$	V_{DS}=10V, I_D=1μA		-1	-4	V
Drain-Source On-State Resistance	$R_{DS(ON)}$	V_{DS}=10mV, V_{GS}=0V		250		Ω
Forward Transfer Admittance	$\|Y_{FS}\|$	V_{DS}=10V, V_{GS}=0V, f =1MHz	2.5	6.0		mS
DYNAMIC PARAMETERS						
Input Capacitance	C_{ISS}	V_{DS}=10V,V_{GS}=0V,f =1MHz		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