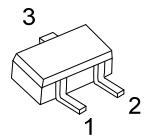
2SK302

JFET

LOW-FREQUENCY GENERAL-PURPOSE AMPLIFIER APPLICATIONS



SOT-23S
(EIAJ SC-59)

■ FEATURES

* Ideal For Potentiometers
* Analog Switches
* Low Frequency Amplifiers
* Constant Current Supplies
* Impedance Conversion

■ ORDERING INFORMATION

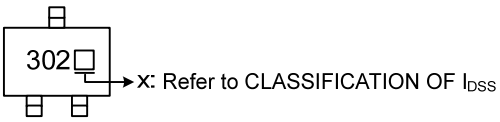
Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SK302L-xx-AE3S-R	2SK302G-xx-AE3S-R	SOT-23S	S	D	G	Tape Reel

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

2SK302G-xx-AE3S-R

(1)Packing Type	(1) R: Tape Reel
(2)Package Type	(2) AE3S: SOT-23S
(3)Rank	(3) x: Refer to Classification of I_{DSS}
(4)Green Package	(4) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING



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■ 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	P_D	200	mW
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)

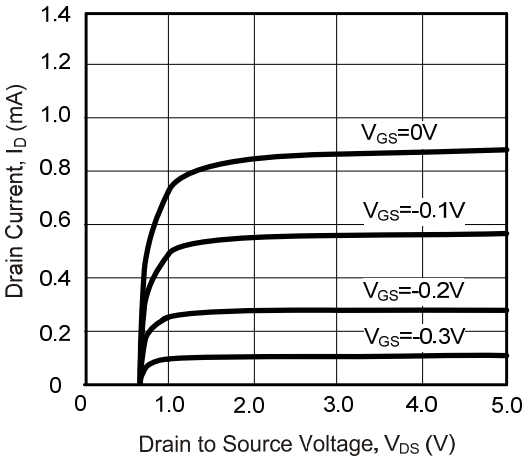
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
OFF CHARACTERISTICS						
Gate to Drain Breakdown Voltage	BV_{GDS}	I_G=-10μA	-30			V
Drain-Source Leakage Current	I_{DSS}	V_{DS}=10V,V_{GS}=0V	0.6		1.6	mA
Gate-Source Leakage Current	I_{GSS}	V_{GS}=-20V			-1.0	nA
ON CHARACTERISTICS						
Gate Cutoff Voltage	$V_{GS(OFF)}$	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}

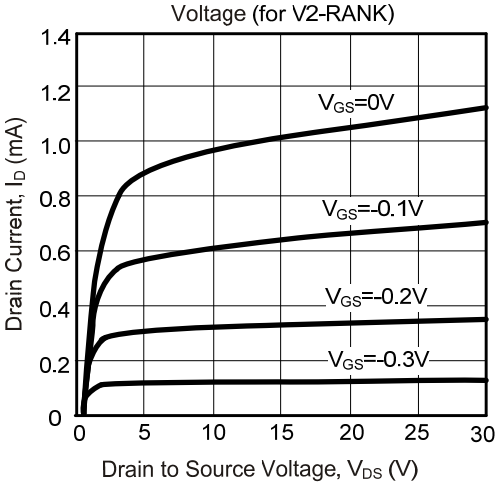
RANK	A	B	C
I_{DSS} (mA)	0.6 ~ 0.8	0.8 ~ 1.2	1.2 ~ 1.6

■ TYPICAL CHARACTERISTICS

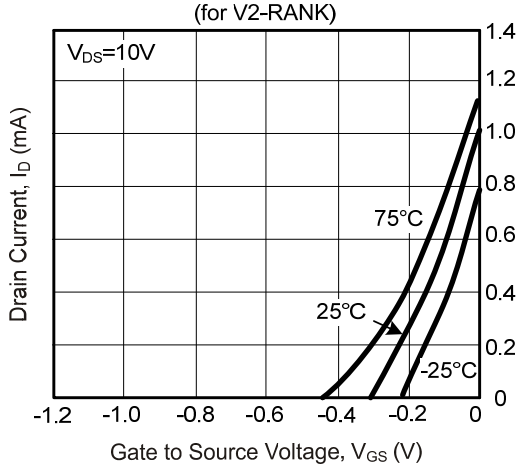
Drain Current vs. Drain to Source Voltage (for V2-RANK)



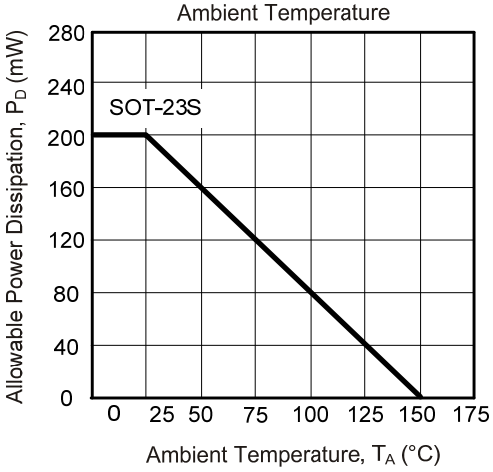
Drain Current vs. Drain to Source Voltage (for V2-RANK)



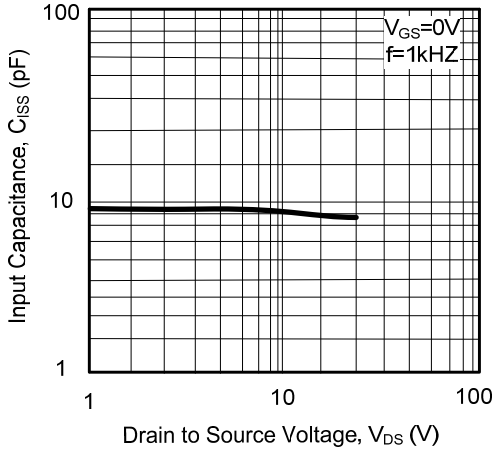
Drain Current vs. Gate to Source Voltage (for V2-RANK)



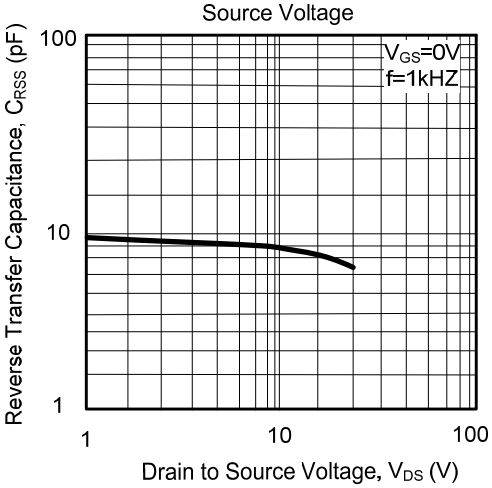
Allowable Power Dissipation vs. Ambient Temperature



Input Capacitance vs. Drain to Source Voltage



Reverse Transfer Capacitance vs. Drain to Source Voltage



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