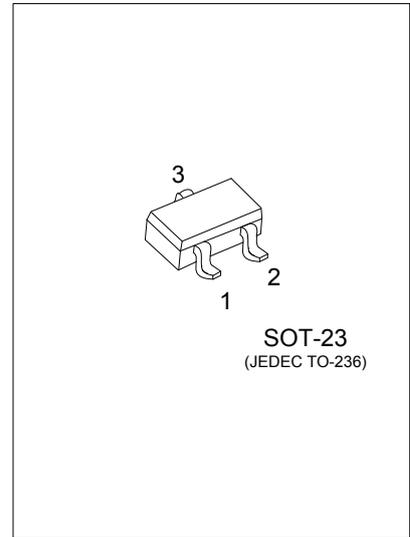




2SK508

N-CHANNEL JFET

HIGH FREQUENCY AMPLIFIER N-CHANNEL SILICON JUNCTION FIELD EFFECT TRANSISTOR



DESCRIPTION

The UTC **2SK508** is NPN transistor with High forward transfer admittance and low input capacitance.

It is suitable for cordless telephone, AM tuner and wireless installation, etc.

FEATURES

* High forward transfer admittance

* Low input capacitance

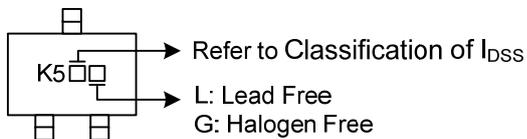
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SK508L-xxx-AE3-R	2SK508G-xxx-AE3-R	SOT-23	S	D	G	Tape Reel

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

<p>2SK508G-xxx-AE3-R</p> <p>(1)Packing Type (2)Package Type (3)Rank (4)Green Package</p>	<p>(1) R: Tape Reel (2) AE3: SOT-23 (3) x: Refer to Classification of I_{DSS} (4) G: Halogen Free and Lead Free, L: Lead Free</p>
--	--

MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Gate to Drain Voltage	V_{GDO}	-15	V
Gate to Source Voltage	V_{GSO}	-15	V
Drain to Source Voltage ($V_{GS}=-4.0\text{ V}$)	V_{DSX}	15	V
Drain Current (DC)	I_D	50	mA
Gate Current (DC)	I_G	5	mA
Power Dissipation	P_D	200	mW
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)

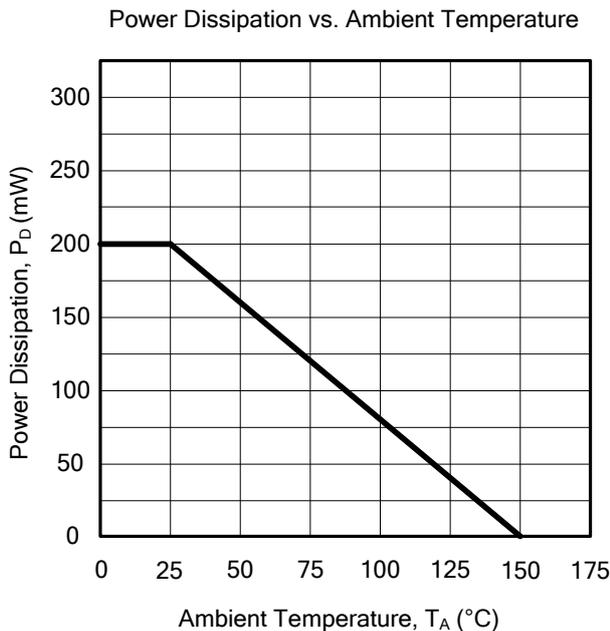
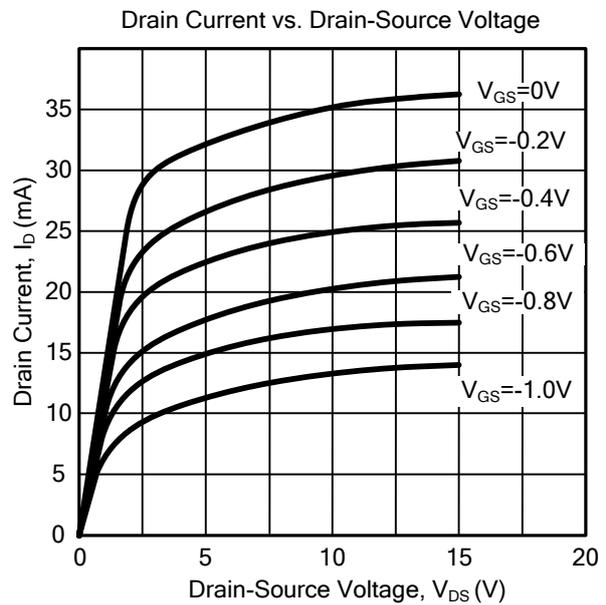
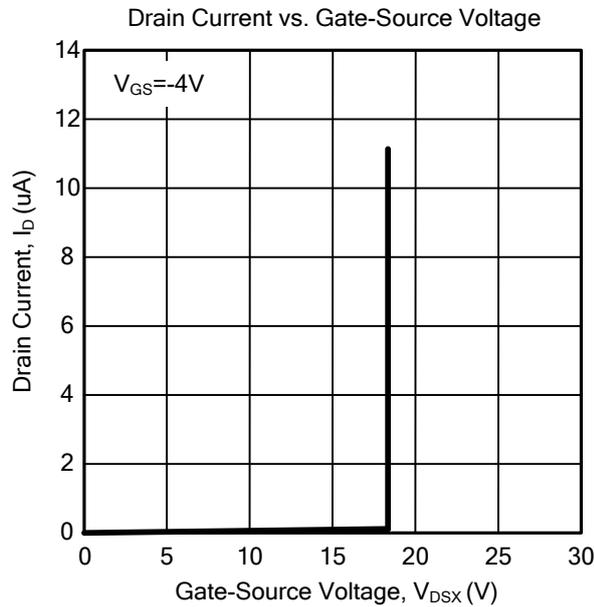
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Gate Cut-Off Current	I_{GSS}	$V_{GS}=-10\text{V}$, $V_{DS}=0\text{V}$			-1.0	nA
Zero Gate Voltage Drain Current (Note)	I_{DSS}	$V_{DS}=5.0\text{V}$, $V_{GS}=0\text{V}$	10	20	50	mA
Gate to Source Cut-Off Voltage	$V_{GS(off)}$	$V_{DS}=5.0\text{V}$, $I_D=10\mu\text{A}$	-0.6	-1.4	-3.5	V
Forward Transfer Admittance (Note)	$ y_{FS} 1$	$V_{DS}=5.0\text{V}$, $I_D=10\text{mA}$, $f=1.0\text{kHz}$	14	19		mS
	$ y_{FS} 2$	$V_{DS}=5.0\text{V}$, $V_{GS}=0\text{V}$, $f=1.0\text{kHz}$	14	26		mS
Input Capacitance	C_{ISS}	$V_{DS}=5.0\text{V}$, $I_D=10\text{mA}$, $f=1.0\text{MHz}$		4.8		pF
Feedback Capacitance	C_{RSS}	$V_{DS}=5.0\text{V}$, $I_D=10\text{mA}$, $f=1.0\text{MHz}$		1.6		pF

Note: Pulsed: $P_w \leq 1\text{ms}$, Duty Cycle $\leq 1\%$.

■ I_{DSS} CLASSIFICATION

MARKING	K51	K52	K53
I_{DSS} (mA)	10 ~ 20	15 ~ 30	25 ~ 50

■ TYPICAL CHARACTERISTICS



UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.