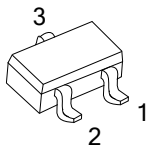
2SK508

Preliminary **NPN EPITAXIAL SILICON TRANSISTOR**

HIGH FREQUENCY AMPLIFIER N-CHANNEL SILICON JUNCTION FIELD EFFECT TRANSISTOR



SOT-23
(EIAJ SC-59)

■ 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

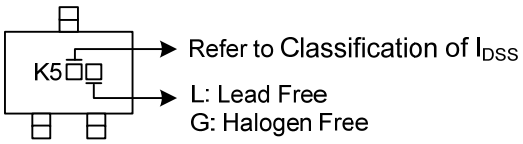
Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SK508L-x-AE3-R	2SK508G-x-AE3-R	SOT-23	D	S	G	Tape Reel

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

2SK508L-x-AE3-R
(1)Packing Type
(2)Package Type
(3)Rank
(4)Lead Free

(1) R: Tape Reel
(2) AE3: SOT-23
(3) x: Refer to Classification of I_{DSS}
(4) G: Halogen Free, L: Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_A=25°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 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	°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
Gate Cut-Off Current	I_{GSS}	V_{GS}=-10V, V_{DS}=0V			-1.0	nA
Zero Gate Voltage Drain Current (Note 1)	I_{DSS}	V_{DS}=5.0V, V_{GS}=0V	10	20	50	mA
Gate to Source Cut-Off Voltage	$V_{GS(off)}$	V_{DS}=5.0V, I_D=10μA	-0.6	-1.4	-3.5	V
Forward Transfer Admittance (Note 1)	$\|y_{FS}\|1$	V_{DS}=5.0V, I_D=10mA, f=1.0kHz	14	19		mS
	$\|y_{FS}\|2$	V_{DS}=5.0V, V_{GS}=0V, f=1.0kHz	14	26		mS
Input Capacitance	C_{ISS}	V_{DS}=5.0V, I_D=10mA, f=1.0MHz		4.8		pF
Feedback Capacitance	C_{RSS}	V_{DS}=5.0V, I_D=10mA, f=1.0MHz		1.6		pF

Note: 1. Pulsed: P_W≤1ms, Duty Cycle≤1%

■ I_{DSS} CLASSIFICATION

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