

# UTC UNISONIC TECHNOLOGIES CO., LTD

2SK508 **N-CHANNEL JFET** 

# HIGH FREQUENCY AMPLIFIER N-CHANNEL SILICON JUNCTION FIELD EFFECT **TRANSISTOR**



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

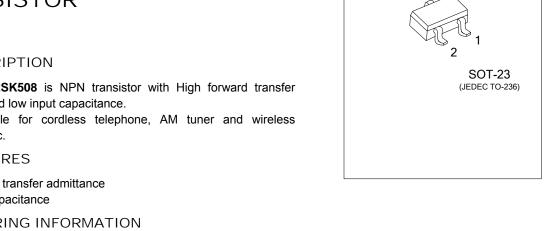
It is suitable for cordless telephone, AM tuner and wireless installation, etc.

#### **FEATURES**

- \* High forward transfer admittance
- \* Low input capacitance

#### ORDERING INFORMATION

Ordering Number



Package

Pin Assignment

Packing

			_		
2SK508G-x-AE3-R	SOT-23	D	S	G	Tape Reel
Note: Pin Assignment: D: Drain S: Source G: Gate					
2SK508G-x-AE3-R (1)Packing Type (2)Package Type (3)Rank (4)Green Package	(1) R: Tape Red (2) AE3: SOT-2 (3) x: Refer to C (4) G: Halogen	:3 Classific			

#### **MARKING**



www.unisonic.com.tw 1 of 3 2SK508 N-CHANNEL JFET

#### ■ ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=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 <sub>GS</sub> =-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 <sub>STG</sub>	-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<sub>A</sub>=25°C, unless otherwise specified)

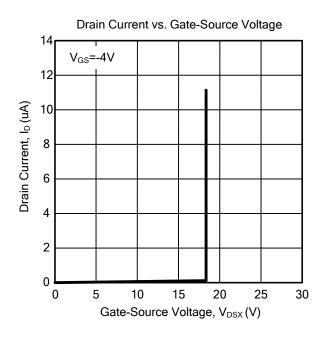
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Gate Cut-Off Current	I <sub>GSS</sub>	V <sub>GS</sub> =-10V, V <sub>DS</sub> =0V			-1.0	nA
Zero Gate Voltage Drain Current (Note)	I <sub>DSS</sub>	V <sub>DS</sub> =5.0V, V <sub>GS</sub> =0V	10	20	50	mA
Gate to Source Cut-Off Voltage	$V_{GS(off)}$	$V_{DS}$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

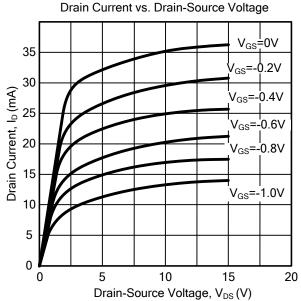
Note: Pulsed: P<sub>W</sub>≤1ms, Duty Cycle≤1%.

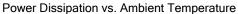
### ■ I<sub>DSS</sub> CLASSIFICATION

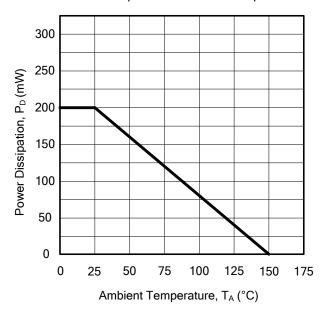
MARKING	K51	K52	K53
I <sub>DSS</sub> (mA)	10 ~ 20	15 ~ 30	25 ~ 50

#### ■ 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. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.

## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for JFET category:

Click to view products by Unisonic manufacturer:

Other Similar products are found below:

MCH3914-8-TL-H F5606 2SK536-TB-E 2SK2394-6-TB-E CPH5901F-TL-E CPH5901G-TL-E CPH5902H-TL-E MCH3914-7-TL-H MCH5908H-TL-E CPH5902G-TL-E CPH5905G-TL-E CPH5905H-TL-E 2N3819 PN4393 MMBFJ176 MMBFJ202 MMBFJ270 J270\_D27Z NSVJ3910SB3T1G 2N5116 2N5116 CMPF4392 TR 2N4092 2N4093 2N4117 IFN5911 IFN406 2N4393 U311 2N5397 2SK208-GR(TE85L,F) MMBF4393LT1G J176\_D74Z 702381A 2N4391 2N4392 2N4393 2N4416A 2N4416A TIN/LEAD 2N4857A 2N4858A 2N5458 2N5486 PN4391 PN4393 2SK508G-K53-AE3-R 2SK508G-K51-AE3-R GA20JT12-263 GA50JT12-247 IFN5566