UNISONIC TECHNOLOGIES CO., LTD

2SK3666 **Preliminary JFET**

N-CHANNEL JUNCTIN SILICON FET

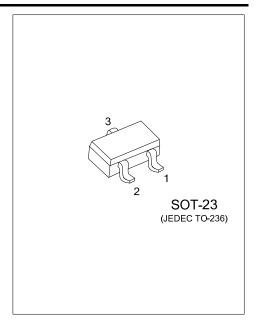
DESCRIPTION

The UTC 2SK3666 is an N-channel junctin silicon FET, it uses UTC's advanced technology to provide the customers with low $I_{\mbox{\scriptsize GSS}}$

The UTC 2SK3666 is suitable for low-frequency general-purpose amplifier, impedance conversion, infrared sensor applications.

FEATURES

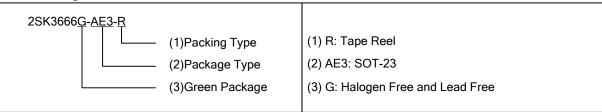
- * Low I_{GSS}
- * Low C_{RSS}



ORDERING INFORMATION

Oudoving Niverbox	Package	Pin Assignment			Darlina	
Ordering Number		1	2	3	Packing	
2SK3666G-AE3-R	SOT-23	S	D	G	Tape Reel	

Note: Pin Assignment: A: Anode K: Cathode



MARKING



■ **ABSOLUTE MAXIMUM RATINGS** (T_C=25°C, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Drain-Source Voltage		V_{DSS}	30	V
Gate-Drain Voltage		V_{GDS}	-30	V
Gate Current		I_{G}	10	mA
Drain Current	Continuous	I _D	10	mA
Power Dissipation		P_{D}	200	mW
Junction Temperature		T_J	150	°C
Storage Temperature Range		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_C=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT		
OFF CHARACTERISTICS								
Gate-Drain Breakdown Voltage	$V_{(BR)GDS}$	I _G =-10μA, V _{DS} =0V	-30			V		
Drain-Source Leakage Current	I _{DSS}	V _{DS} =10V, V _{GS} =0V	0.6		6.0	mA		
Gate-Source Leakage Current	I _{GSS}	V _{GS} =-20V, V _{DS} =0V			-1.0	nA		
Forward Transfer Admittance	yfs	V _{GS} =0V, V _{DS} =10V, f=1kHz	3.0	6.5		mS		
ON CHARACTERISTICS								
Cutoff Voltage	$V_{GS(OFF)}$	V_{DS} =10V, I_D =1 μ A	-0.18	-0.95	-2.2	V		
Static Drain-Source On-State Resistance	R _{DS(ON)}	V _{GS} =0V, V _{DS} =10mV		270		Ω		
DYNAMIC PARAMETERS								
Input Capacitance	C _{ISS}	\\ \ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \		4		pF		
Reverse Transfer Capacitance	C _{RSS}	$V_{GS}=0V$, $V_{DS}=10V$, $f=1.0MHz$		1.1		pF		

■ CLASSIFICATION OF I_{DSS}

RANK	2	3	4	
RANGE	0.6 ~ 1.5	1.2 ~ 3.0	2.5 ~6.0	

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