

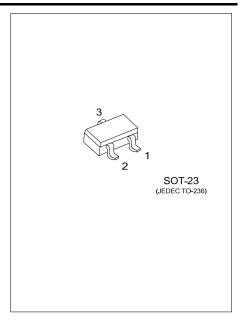
# UTC UNISONIC TECHNOLOGIES CO., LTD

**UJ0100 JFET** 

# **LOW-FREQUENCY GENERAL-PURPOSE AMPLIFIER APPLICATIONS**

### **FEATURES**

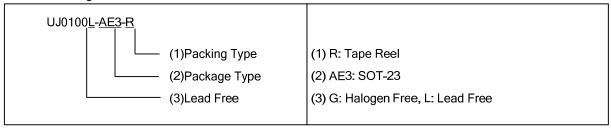
- \* Ideal For Potentiometers
- \* Analog Switches
- \* Low Frequency Amplifiers
- \* Constant Current Supplies
- \* Impedance Conversion



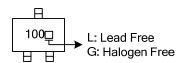
#### ORDERING INFORMATION

	Ordering Number		Dealtons	Pin Assignment			Doolsing	
	Lead Free	Halogen Free	Package	1	2	3	Packing	
	UJ0100L-AE3-R	UJ0100G-AE3-R	SOT-23	D	S	G	Tape Reel	

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



#### **MARKING**



www.unisonic.com.tw 1 of 3 UJ0100 JEET

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

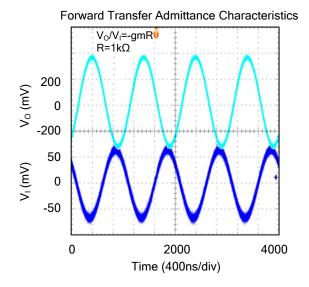
PARAMETER	SYMBOL	RATINGS	UNIT	
Drain to Source Voltage	$V_{DSS}$	30	V	
Gate to Source Voltage	$V_{GSS}$	-30	V	
Gate Current	$I_{G}$	10	mA	
Drain Current	I <sub>D</sub>	20	mA	
Power Dissipation	$P_D$	200	mW	
Junction Temperature	$T_J$	150	°C	
Storage Temperature	T <sub>STG</sub>	-55 ~ +150	°C	

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				
OFF CHARACTERISTICS										
Gate to Drain Breakdown Voltage	$BV_GDS$	I <sub>G</sub> =-10μA	-30			V				
Drain-Source Leakage Current	I <sub>DSS</sub>	V <sub>DS</sub> =10V,V <sub>GS</sub> =0V	0.6		2.5	mA				
Gate-Source Leakage Current	$I_{GSS}$	V <sub>GS</sub> =-20V			-1.0	nA				
ON CHARACTERISTICS										
Gate Cutoff Voltage	$V_{GS(OFF)}$	$V_{DS}$ =10V, $I_D$ =1 $\mu$ A		-1	-4	V				
Drain-Source On-State Resistance	R <sub>DS(ON)</sub>	V <sub>DS</sub> =10mV, V <sub>GS</sub> =0V		250		Ω				
Forward Transfer Admittance	Y <sub>FS</sub>	$V_{DS}$ =10V, $V_{GS}$ =0V, f =1MHz	2.5	6.0		mS				
DYNAMIC PARAMETERS										
Input Capacitance	C <sub>ISS</sub>	\/ -10\/\/ -0\/f-1MH-		5		pF				
Reverse Transfer Capacitance	C <sub>RSS</sub>	$V_{DS}$ =10V, $V_{GS}$ =0V, $f$ =1MHz		1.5		pF				

#### **■ 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.