# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# 2SK715

# N-Channel JFET 15V, 7.3 to 24mA, 50mS



### **Applications**

- AM Tuner RF Amp, Low-noise Amp
- HF Low-noise Amp

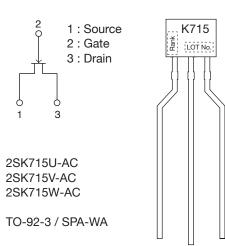
### Features

- Adoption of FBET Process
- Large |yfs|
- Small Ciss
- Very Low Noise Figure

# **Specifications**

#### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Ratings	Unit
Drain-to-Source Voltage	VDSS	15	V
Gate-to-Drain Voltage	VGDS	-15	V
Gate Current	IG	10	mA
Drain Current	ID	50	mA
Allowable Power Dissipation	PD	300	mW
Junction Temperature	Tj	125	°C
Storage Temperature	Tstg	-55 to +125	°C



Marking

**Electrical Connection** 

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

#### Electrical Characteristics at Ta=25°C

Deveryeter	Cumhal	Conditions			Ratings	
Parameter Symbol		Conditions	min	typ	max	Unit
Gate-to-Drain Breakdown Voltage	V(BR)GDS	I <sub>G</sub> =-10μA, V <sub>DS</sub> =0V	-15			V
Gate-to-Source Leakage Current	IGSS	V <sub>GS</sub> =-10V, V <sub>DS</sub> =0V			-1.0	nA
Zero-Gate Voltage Drain Current	IDSS*	V <sub>DS</sub> =5V, V <sub>GS</sub> =0V	7.3*		24.0*	mA
Cutoff Voltage	V <sub>GS</sub> (off)	V <sub>DS</sub> =5V, I <sub>D</sub> =100µA		-0.6	-1.4	V
Forward Transfer Admittance	yfs	V <sub>DS</sub> =5V, V <sub>GS</sub> =0V, f=1kHz	25	50		mS
Input Capacitance	Ciss			10		pF
Reverse Transfer Capacitance	Crss	VDS=5V, VGS=0V, f=1MHz		3.0		pF
Noise Figure	NF	$V_{DS}=5V, R_q=1k\Omega, I_D=1mA, f=1kHz$		1.5		dB

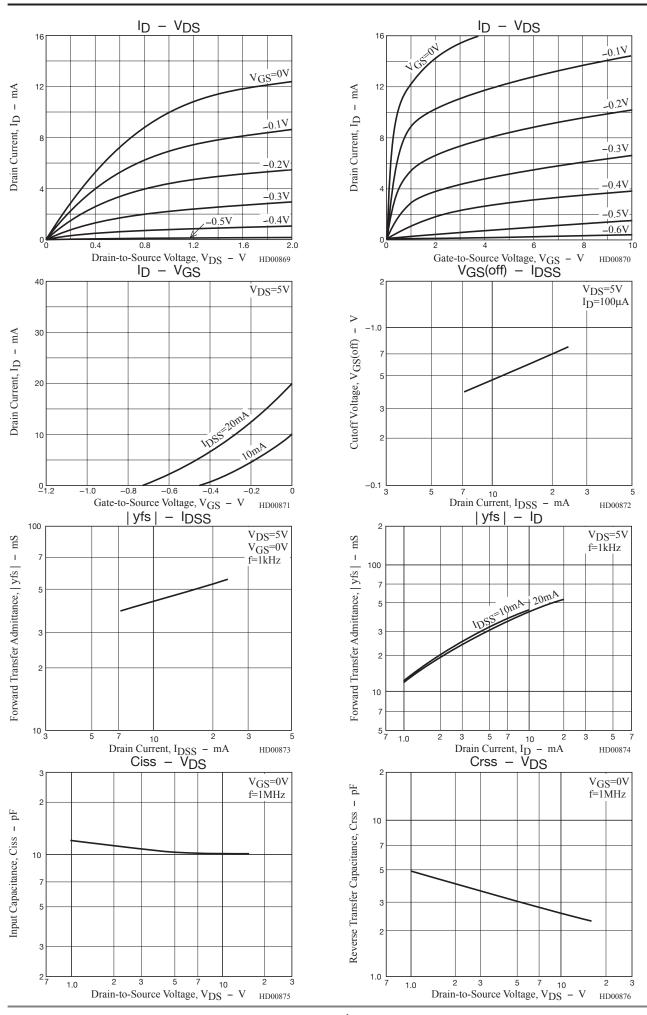
\* : The 2SK715 is classified by IDSS as follows : (unit : mA)

Rank	U	V	W
IDSS	7.3 to 12.0	10.0 to 17.0	14.5 to 24.0

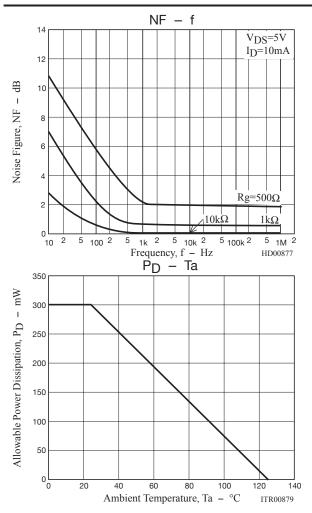
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

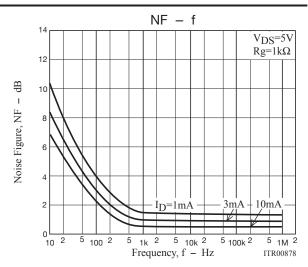
#### **ORDERING INFORMATION**

See detailed ordering and shipping information on page 5 of this data sheet.



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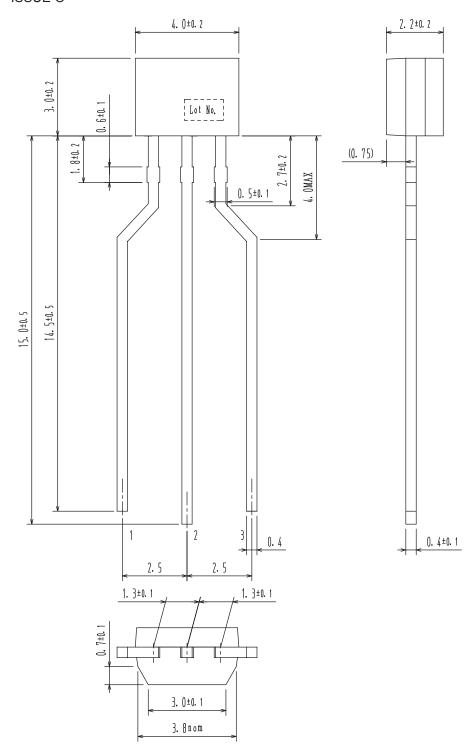
## **Package Dimensions**

unit : mm

2SK715U-AC, 2SK715V-AC, 2SK715W-AC

# TO-92 3 3.0x4.0 / SPA-WA

CASE 135AK ISSUE O



#### **ORDERING INFORMATION**

Device	Package	Shipping	memo
2SK715U-AC			
2SK715V-AC	TO-92-3 / SPA-W	2,500pcs. / Tape and Reel	Pb-Free
2SK715W-AC			

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