## 3SK264

# N-Channnel Dual Gate MOSFET 15V,30mA,PG=23dB,NF=1.1dB, CP4



### Features

- · Enhancement type
- Easy AGC (Cut off at VG2S=0V)
- · Small noise figure
- · Excels in cross modulation characteristics

### **Specifications**

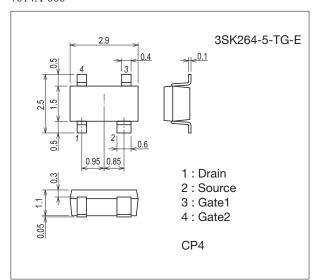
### **Absolute Maximum Ratings** at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V <sub>DS</sub>		15	V
Gate1-to-Source Voltage	V <sub>G1S</sub>		±8	V
Gate2-to-Source Voltage	V <sub>G2S</sub>		<u>±</u> 8	V
Drain Current	ID		30	mA
Allowable Power Dissipation	PD		200	mW
Channel Temperature	Tch		125	°C
Storage Temperature	Tstg		-55 to +125	°C

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.

#### **Package Dimensions**

unit : mm (typ) 7014A-006



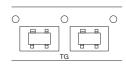
### **Product & Package Information**

• Package : CP4

• JEITA, JEDEC : SC-61, SC-82AB, SOT-143, SOT-343

• Minimum Packing Quantity: 3,000 pcs./reel

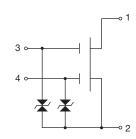
### Packing Type: TG



# SJ ILOT NO.

Marking

### **Electrical Connection**



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

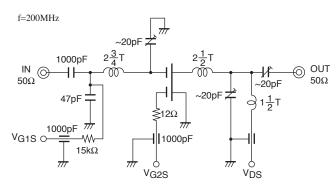
Parameter	Symbol	Conditions	Ratings			Unit
		Conditions	min	typ	max	Onit
Drain-to-Source Voltage	V <sub>DS</sub>	V <sub>G1S</sub> =0V, V <sub>G2S</sub> =0V, I <sub>DS</sub> =100μA	15			V
Gate1-to-Source Cutoff Voltage	VG1S(off)	V <sub>DS</sub> =6V, V <sub>G2S</sub> =4V, I <sub>D</sub> =100μA	0	0.7	1.3	V
Gate2-to-Source Cutoff Voltage	V <sub>G2S</sub> (off)	V <sub>DS</sub> =6V, V <sub>G1S</sub> =3V, I <sub>D</sub> =100μA	0.1	0.9	1.6	V
Gate1-to-Source Leakage Current	lG1SS	V <sub>G1S</sub> =±6V, V <sub>G2S</sub> =V <sub>DS</sub> =0V			±50	nA
Gate2-to-Source Leakage Current	I <sub>G2SS</sub>	V <sub>G2S</sub> =±6V, V <sub>G1S</sub> =V <sub>DS</sub> =0V			±50	nA
Zero-Gate Voltage Drain Current	IDSX	V <sub>DS</sub> =6V, V <sub>G1S</sub> =1.5V, V <sub>G2S</sub> =4V	*5		*12	mA
Forward Transfer Admittance	yfs	V <sub>DS</sub> =6V, I <sub>D</sub> =10mA, V <sub>G2S</sub> =4V, f=1kHz		17		mS
Input Capacitance	Ciss	V50-6V V0 10-0V V000-4V f-1MHz		2.5		pF
Reverse Transfer Capacitance	Crss	VDS=6V, VG1S=0V, VG2S=4V, f=1MHz		0.015	0.03	pF
Power Gain	PG	V <sub>DS</sub> =6V, I <sub>D</sub> =10mA, V <sub>G2S</sub> =4V, f=200MHz	20	23		dB
Noise Figure	NF	V <sub>DS</sub> =6V, I <sub>D</sub> =10mA, V <sub>G2S</sub> =4V, f=200MHz		1.1	2.2	dB

 $<sup>^{\</sup>star}$  : The 3SK264 is classified by IDSX as follows : (unit : mA)

Rank	5	
I <sub>DSX</sub>	5.0 to 12.0	

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.

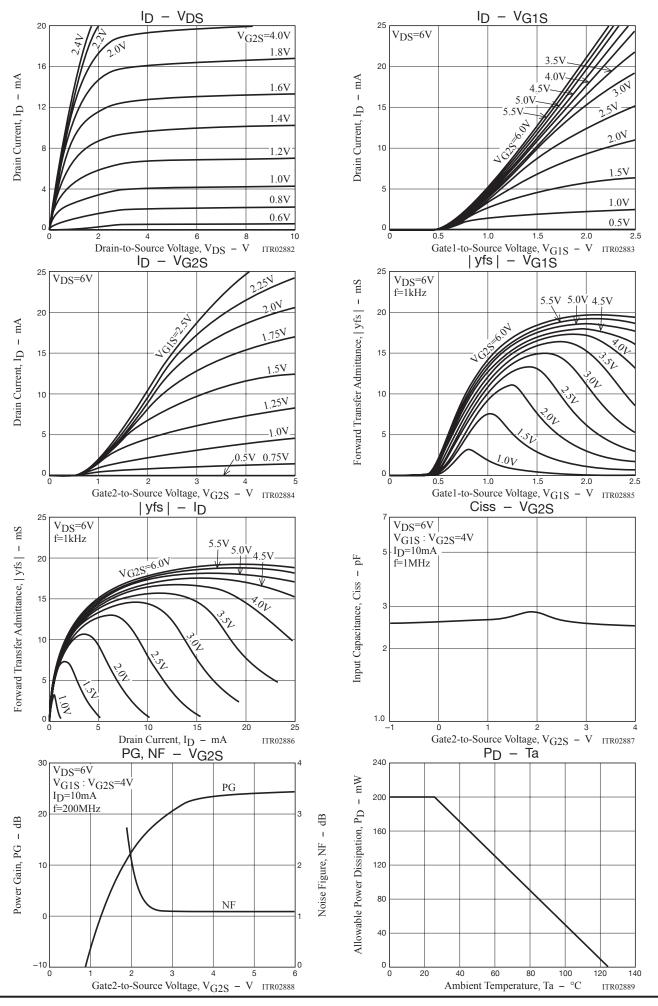
### PG, NF Specified Test Circuit



L: 1mmØ enamel wire 10mmØ

### **Ordering Information**

Device	Package	Shipping	memo	
3SK264-5-TG-E	CP4	3,000pcs./reel	Pb-Free	

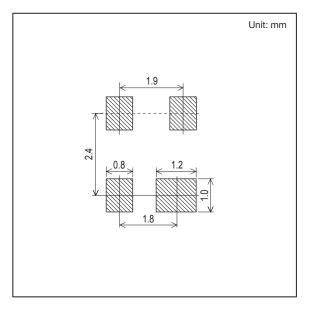


### **Outline Drawing**

3SK264-5-TG-E

### Mass (g) Unit 0.013 mm 2. 9±0. 15 0. 4+0.1 0. 5-0. 25 3 5±0.15 2, 5±0.2 0. 6<sup>+0. 1</sup> 0. 5-0. 15 2 0.95 0.85 0.3±0.1 1. 1±0. 15 O. 1 S \*1:Lot indication

### **Land Pattern Example**



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