



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

3SK264 — N-Channel Silicon MOSFET VHF Tuner, High-Frequency Amplifier Applications

Features

- Enhancement type
- Easy AGC (Cut off at $V_{G2S}=0V$)
- Small noise figure
- Excels in cross modulation characteristics

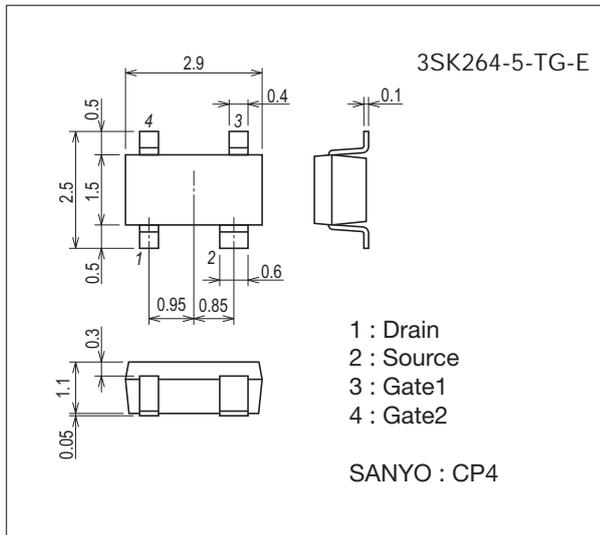
Specifications

Absolute Maximum Ratings at $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DS}		15	V
Gate1-to-Source Voltage	V_{G1S}		± 8	V
Gate2-to-Source Voltage	V_{G2S}		± 8	V
Drain Current	I_D		30	mA
Allowable Power Dissipation	P_D		200	mW
Channel Temperature	T_{ch}		125	$^\circ C$
Storage Temperature	T_{stg}		-55 to +125	$^\circ C$

Package Dimensions

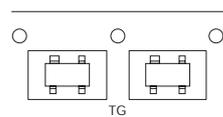
unit : mm (typ)
7014A-006



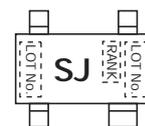
Product & Package Information

- Package : CP4
- JEITA, JEDEC : SC-61, SC-82AB, SOT-143, SOT-343
- Minimum Packing Quantity : 3,000 pcs./reel

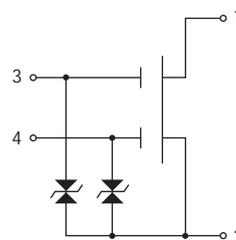
Packing Type: TG



Marking



Electrical Connection



3SK264

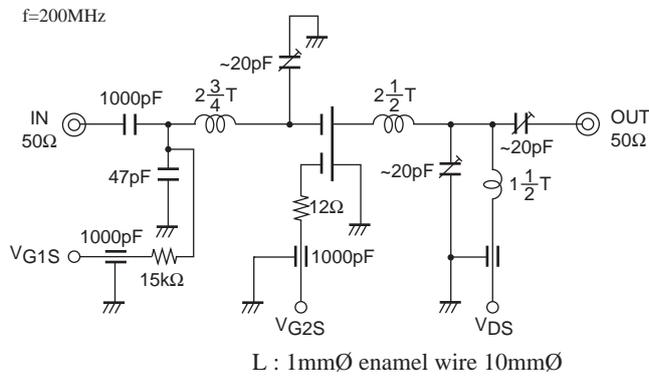
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Voltage	V _{DS}	V _{G1S} =0V, V _{G2S} =0V, I _{DS} =100μA	15			V
Gate1-to-Source Cutoff Voltage	V _{G1S(off)}	V _{DS} =6V, V _{G2S} =4V, I _D =100μA	0	0.7	1.3	V
Gate2-to-Source Cutoff Voltage	V _{G2S(off)}	V _{DS} =6V, V _{G1S} =3V, I _D =100μA	0.1	0.9	1.6	V
Gate1-to-Source Leakage Current	I _{G1SS}	V _{G1S} =±6V, V _{G2S} =V _{DS} =0V			±50	nA
Gate2-to-Source Leakage Current	I _{G2SS}	V _{G2S} =±6V, V _{G1S} =V _{DS} =0V			±50	nA
Zero-Gate Voltage Drain Current	I _{DSX}	V _{DS} =6V, V _{G1S} =1.5V, V _{G2S} =4V	5.0*		24.0*	mA
Forward Transfer Admittance	y _{fs}	V _{DS} =6V, I _D =10mA, V _{G2S} =4V, f=1kHz		17		mS
Input Capacitance	C _{iss}	V _{DS} =6V, V _{G1S} =0V, V _{G2S} =4V, f=1MHz		2.5		pF
Reverse Transfer Capacitance	C _{rss}			0.015	0.03	pF
Power Gain	PG	V _{DS} =6V, I _D =10mA, V _{G2S} =4V, f=200MHz	20	23		dB
Noise Figure	NF	V _{DS} =6V, I _D =10mA, V _{G2S} =4V, f=200MHz		1.1	2.2	dB

* : The 3SK264 is classified by I_{DSX} as follows : (unit : mA)

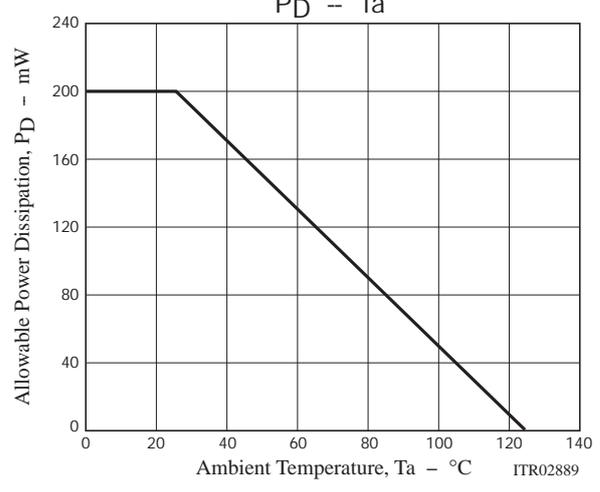
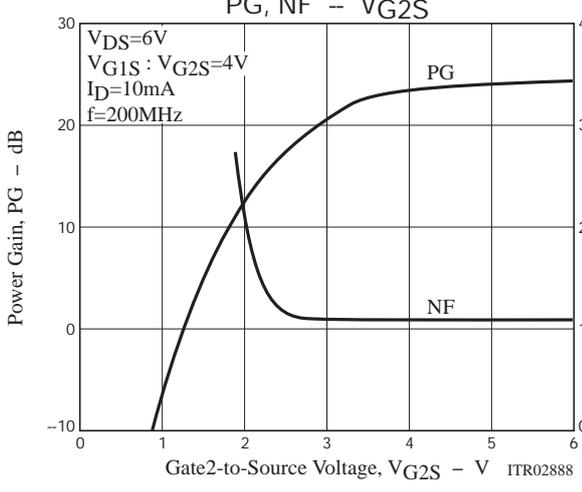
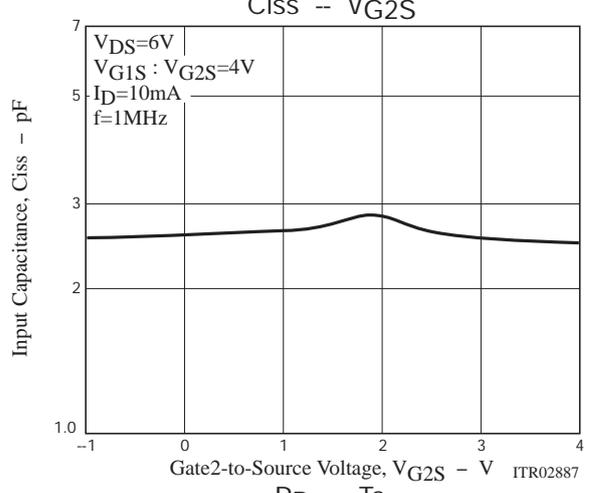
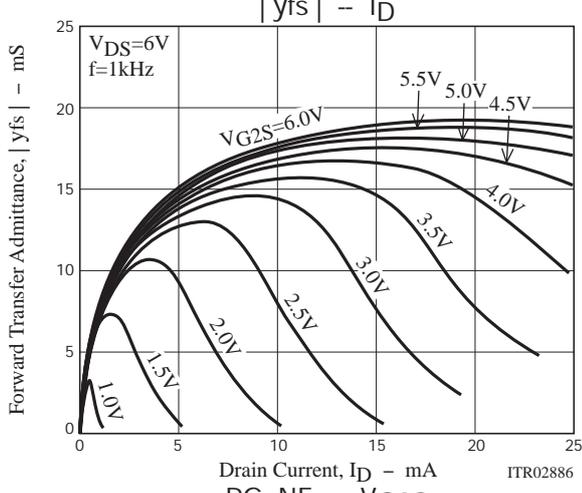
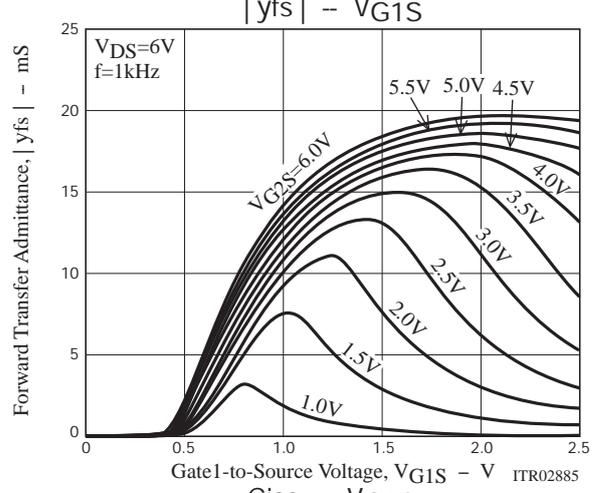
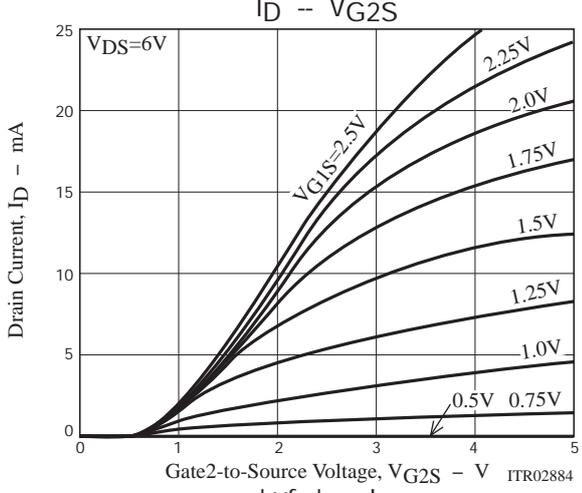
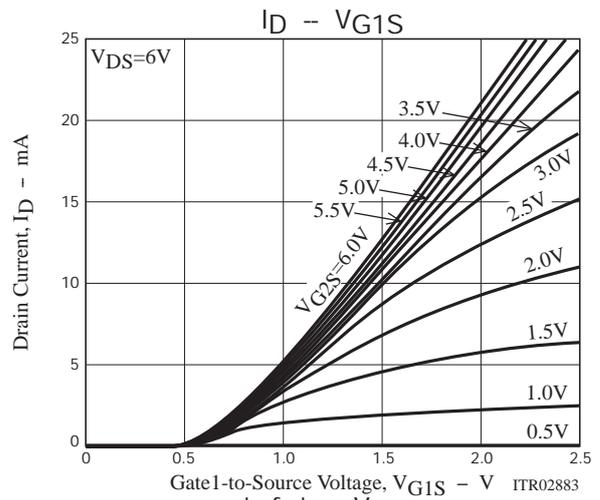
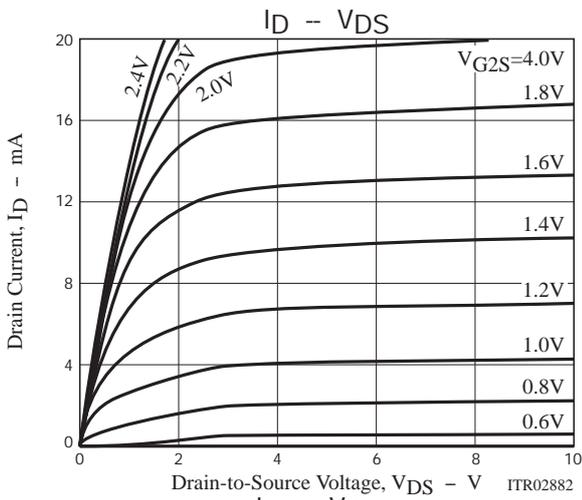
Rank	5	6
I _{DSX}	5.0 to 12.0	10.0 to 24.0

PG, NF Specified Test Circuit



Ordering Information

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



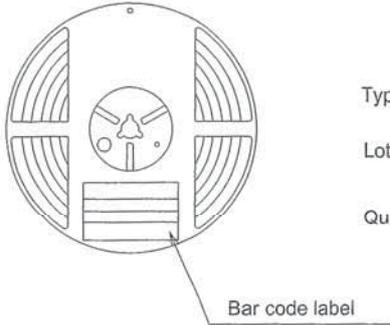
Embossed Taping Specification

3SK264-5-TG-E

Storage package Outline name	Carrier tape Type number	Maximum Number of devices contained (pcs.)			Packing format	
		Reel	Inner box	Outer box	Inner box BOX (C-1)	Outer box BOX (A-7)
CP4	CP4	3,000	15,000	90,000	5 reels contained Dimensions:mm(external). 1 8 3 × 7 2 × 1 8 5	6 inner boxes contained Dimensions:mm(external) 4 4 0 × 1 9 5 × 2 1 0

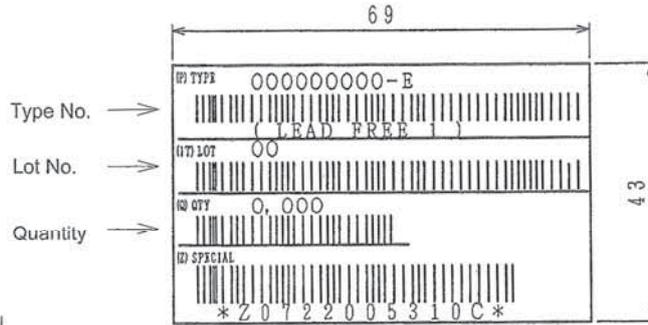
1. Packing format

Packing method



Bar code label (Example)

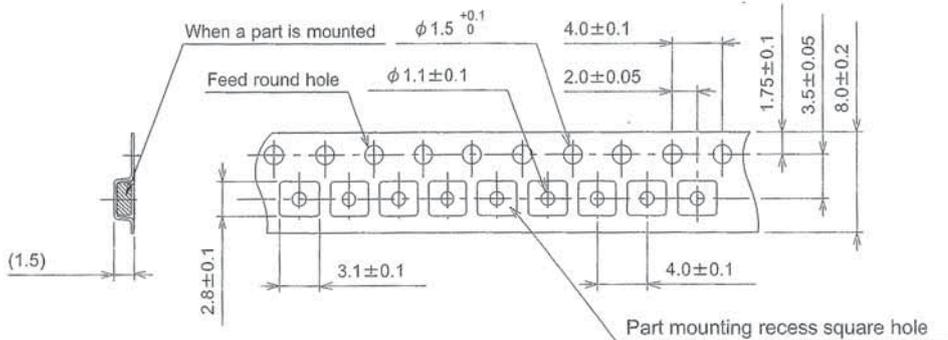
(Unit : mm)



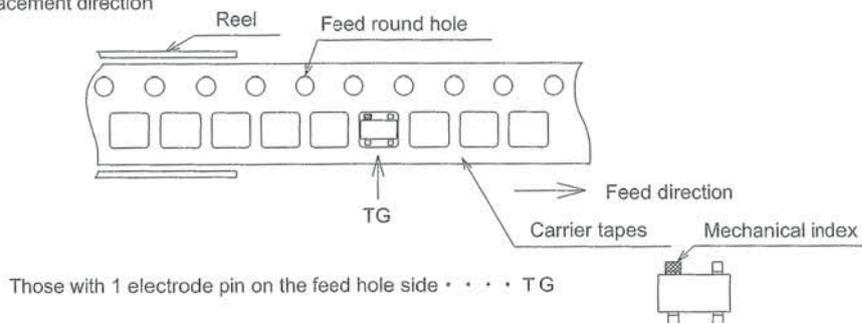
*LEAD FREE 1 :
Lead-free External terminal surface treatment product.

2. Taping structure

2-1. Carrier tape size (Unit : mm)

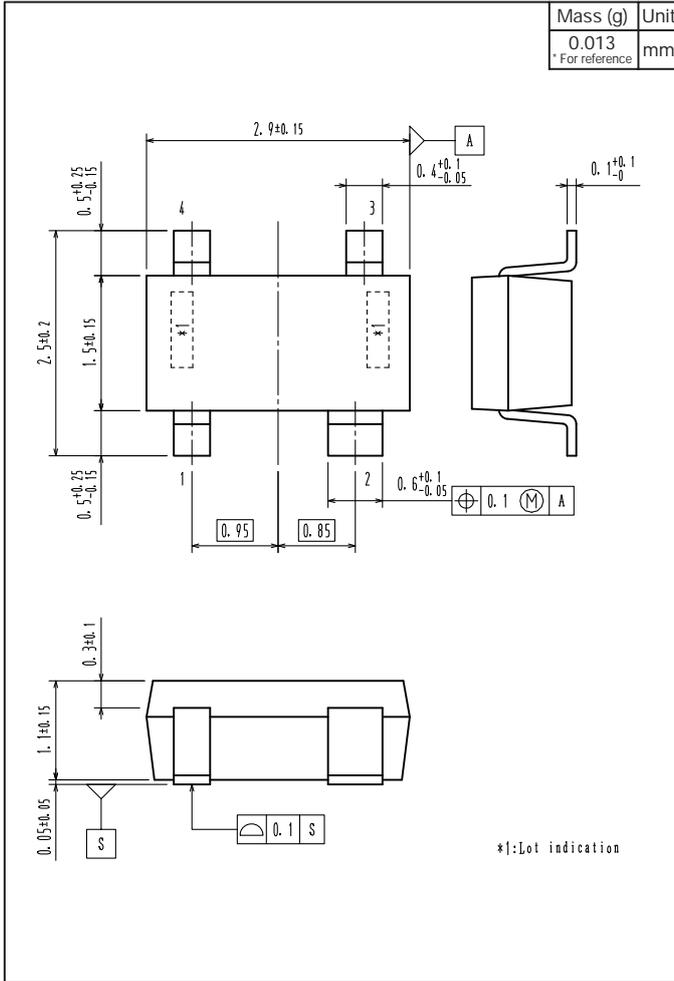


2-2. Parts placement direction

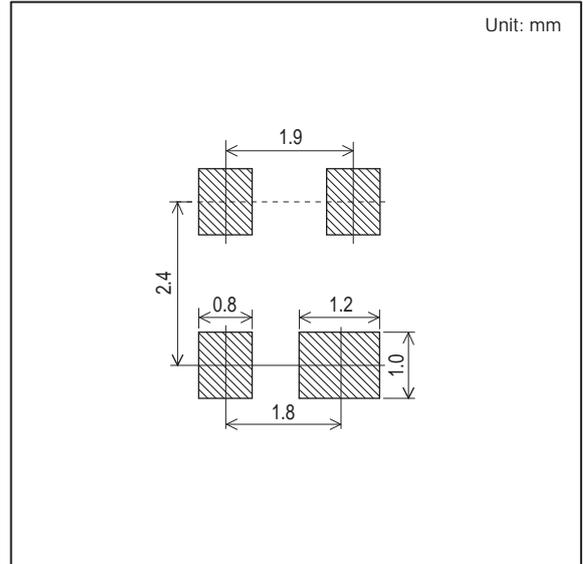


3SK264

Outline Drawing 3SK264-5-TG-E



Land Pattern Example



Note on usage : Since the 3SK264 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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