

SANYO Semiconductors DATA SHEET

An ON Semiconductor Company

N-Channel Silicon MOSFET (Dual Gate)

3SK263 — FM Tuner, VHF Tuner, High-Frequency Amplifier Applications

Features

- · Enhancement type
- · Small noise figure
- · Small cross modulation

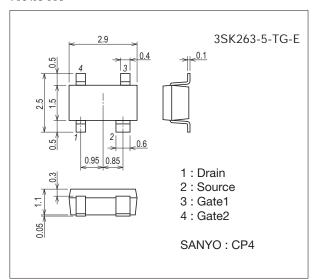
Specifications

Absolute Maximum Ratings at Ta=25°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	ID		30	mA
Allowable Power Dissipation	PD		200	mW
Channel Temperature	Tch		125	°C
Storage Temperature	Tstg		-55 to +125	°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

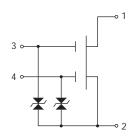
Packing Type: TG

O O O

Marking



Electrical Connection



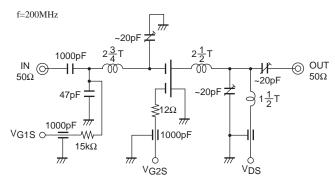
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit	
Parameter	Syllibol	Conditions	min	typ	max	Utill	
Drain-to-Source Voltage	VDS	VG1S=0V, VG2S=0V, ID=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	l _{G1SS}	V _{G1S} =±6V, V _{G2S} =V _{DS} =0V			±50	nA	
Gate2-to-Source Leakage Current	IG2SS	VG2S=±6V, VG1S=VDS=0V			±50	nA	
Zero-Gate Voltage Drain Current	I _{DSX}	V _{DS} =6V, V _{G1S} =1.5V, V _{G2S} =4V	2.5*		24*	mA	
Forward Transfer Admittance	yfs	V _{DS} =6V, I _D =10mA, V _{G2S} =4V, f=1kHz		14		mS	
Input Capacitance	Ciss	VDS=6V, f=1MHz, VG1S=0V, VG2S=4V		2.7		pF	
Reverse Transfer Capacitance	Crss	VDS=0V, I=1IVIHZ, VG1S=0V, VG2S=4V		0.015	0.03	pF	
Power Gain	PG	V _{DS} =6V, I _D =10mA, V _{G2S} =4V, f=200MHz	18	21		dB	
Noise Figure	NF	V _{DS} =6V, I _D =10mA, V _{G2S} =4V, f=200MHz		1.1	2.2	dB	

* : The 3SK263 is classified by IDSX as follows : (unit : mA)

Rank	4	5	6	
IDSX	2.5 to 6.0	5.0 to 12.0	10.0 to 24.0	

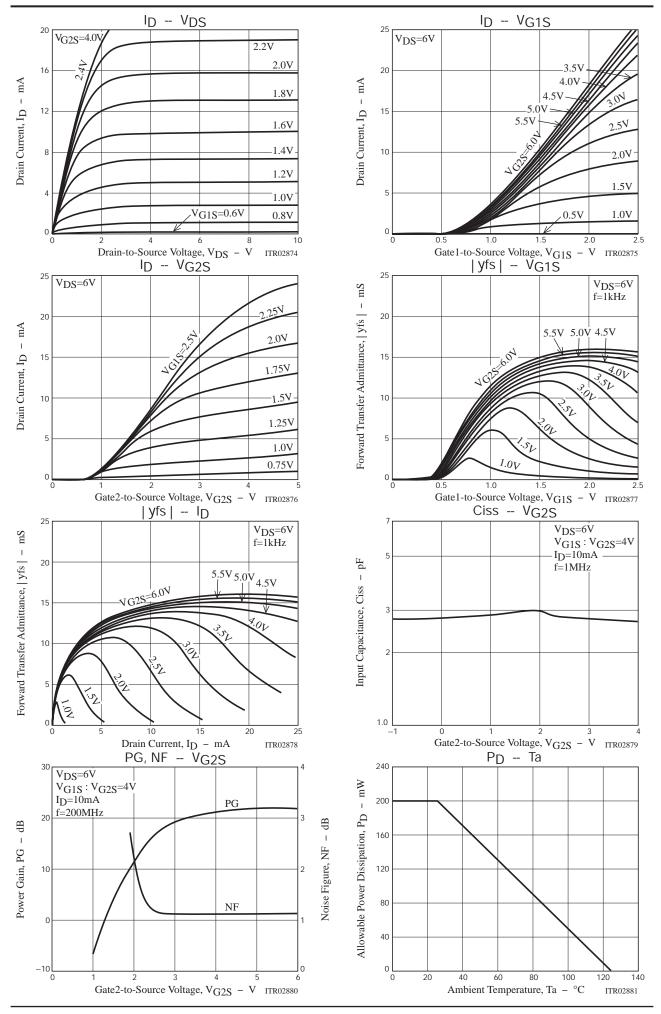
PG, NF Specified Test Circult



 $L:1mm \not O \ enamel \ wire \ 10mm \not O$

Ordering Information

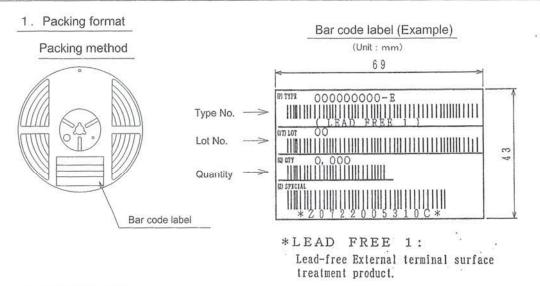
Device	Package	Shipping	memo	
3SK263-5-TG-E	CP4	3,000pcs./reel	Pb Free	



Embossed Taping Specification

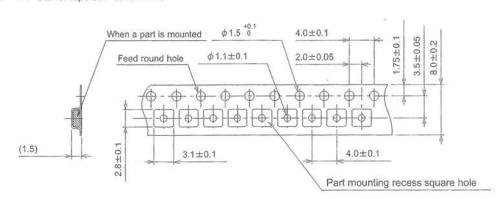
3SK263-5-TG-E

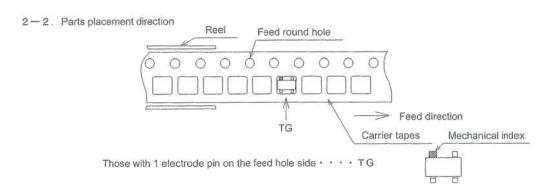
Storage package Outline name Carrier tape Type number	Maximum Number of devices contained (pcs.)			Packing format		
	Type number	Reel	Inner box	Outer box	Inner box BOX (C-1)	Outer box BOX (A-7)
CP4	CP4	3,000	15,000	90,000	5 reels contained Dimensions:mm(external) 1 8 3 × 7 2 × 1 8 5	6 inner boxes contained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



2. Taping structure

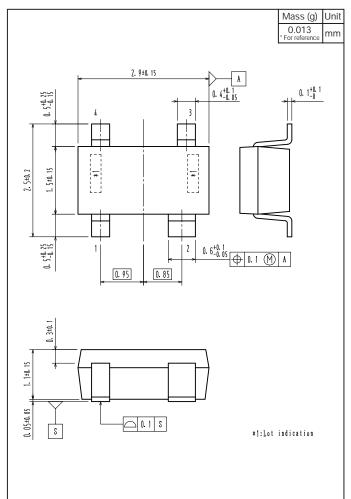
2-1. Carrier tape size (Unit : mm)



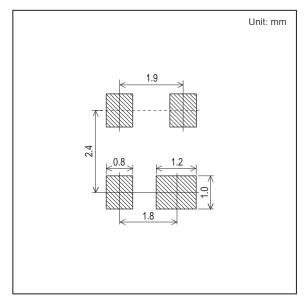


Outline Drawing

3SK263-5-TG-E



Land Pattern Example



Note on usage: Since the 3SK263 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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