



# 3SK263

## N-Channel Dual Gate MOSFET 15V,30mA,PG=21dB,NF=1.1dB, CP4

ON Semiconductor®

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### Features

- Enhancement type
- Small noise figure
- Small cross modulation

### Specifications

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

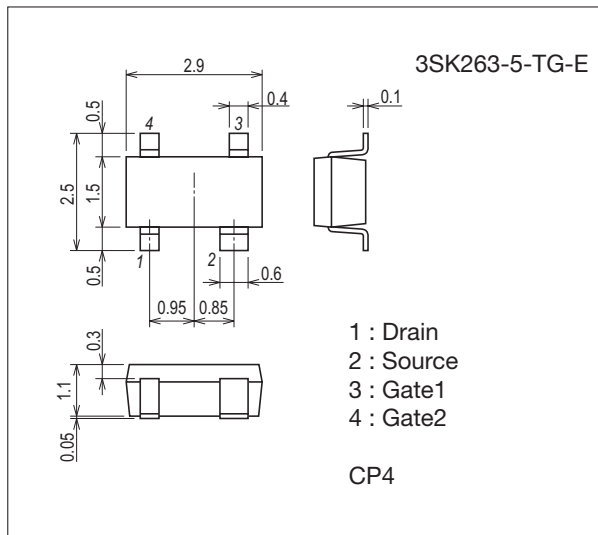
Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V <sub>DS</sub>		15	V
Gate1-to-Source Voltage	V <sub>G1S</sub>		±8	V
Gate2-to-Source Voltage	V <sub>G2S</sub>		±8	V
Drain Current	I <sub>D</sub>		30	mA
Allowable Power Dissipation	P <sub>D</sub>		200	mW
Channel Temperature	T <sub>ch</sub>		125	°C
Storage Temperature	T <sub>stg</sub>		-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)

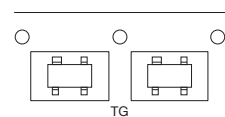
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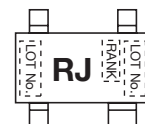
### Product & Package Information

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

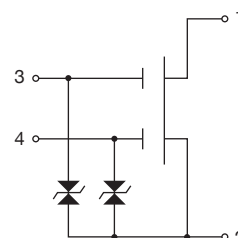
### Packing Type: TG



### Marking



### Electrical Connection



# 3SK263

## Electrical Characteristics at Ta=25°C

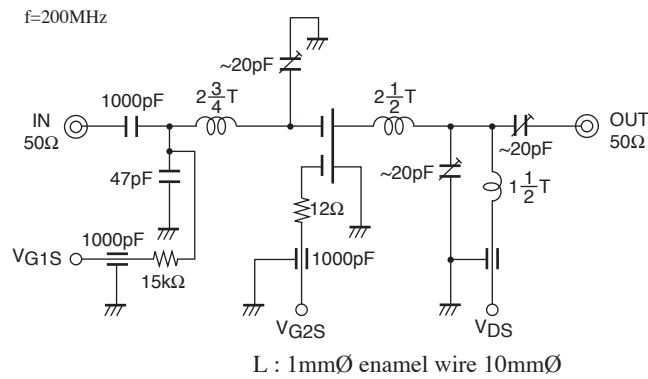
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Voltage	$V_{DS}$	$V_{G1S}=0V, V_{G2S}=0V, I_D=100\mu A$	15			V
Gate1-to-Source Cutoff Voltage	$V_{G1S(off)}$	$V_{DS}=6V, V_{G2S}=4V, I_D=100\mu A$	0	0.7	1.3	V
Gate2-to-Source Cutoff Voltage	$V_{G2S(off)}$	$V_{DS}=6V, V_{G1S}=3V, I_D=100\mu A$	0.1	0.9	1.6	V
Gate1-to-Source Leakage Current	$I_{G1SS}$	$V_{G1S}=\pm 6V, V_{G2S}=V_{DS}=0V$			$\pm 50$	nA
Gate2-to-Source Leakage Current	$I_{G2SS}$	$V_{G2S}=\pm 6V, V_{G1S}=V_{DS}=0V$			$\pm 50$	nA
Zero-Gate Voltage Drain Current	$I_{DSX}$	$V_{DS}=6V, V_{G1S}=1.5V, V_{G2S}=4V$	*5		*12	mA
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=6V, I_D=10mA, V_{G2S}=4V, f=1kHz$		14		mS
Input Capacitance	$C_{iss}$	$V_{DS}=6V, f=1MHz, V_{G1S}=0V, V_{G2S}=4V$		2.7		pF
Reverse Transfer Capacitance	$C_{rss}$			0.015	0.03	pF
Power Gain	PG	$V_{DS}=6V, I_D=10mA, V_{G2S}=4V, f=200MHz$	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  $I_{DSX}$  as follows : (unit : mA)

Rank	5
$I_{DSX}$	5.0 to 12.0

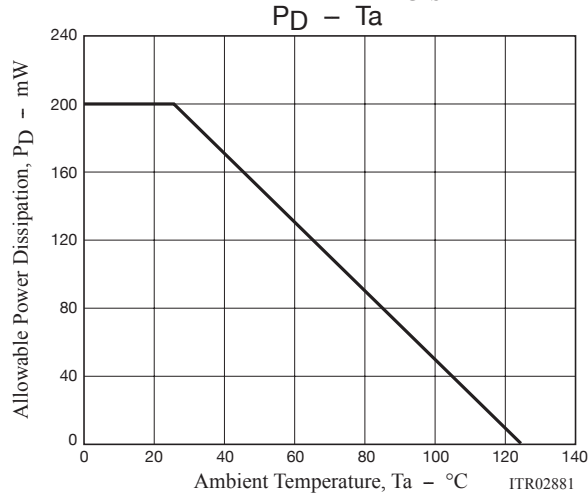
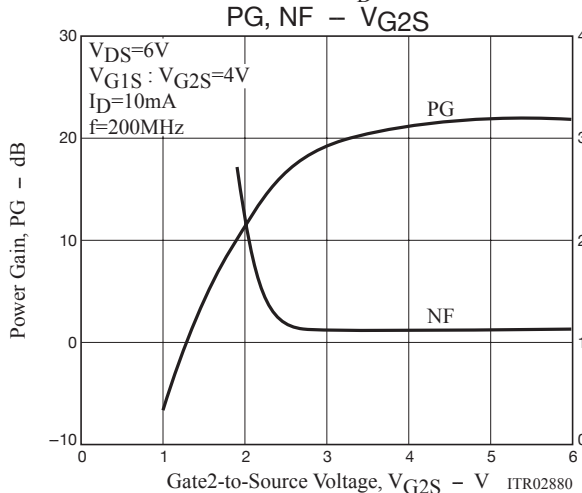
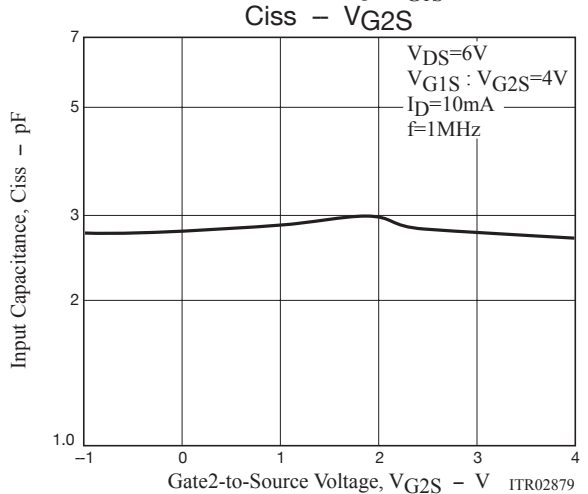
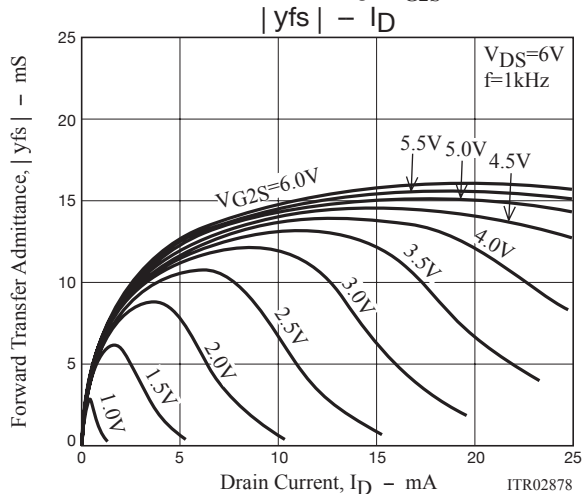
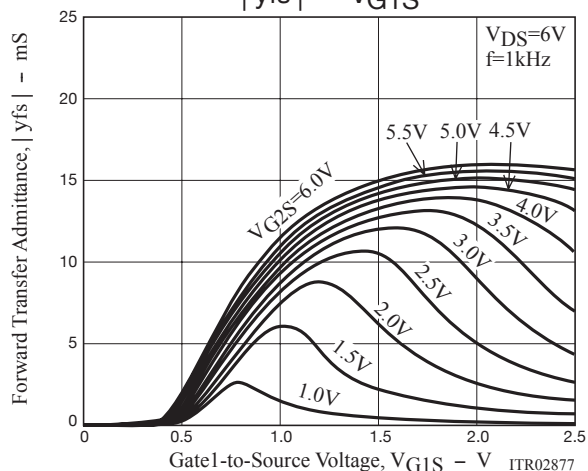
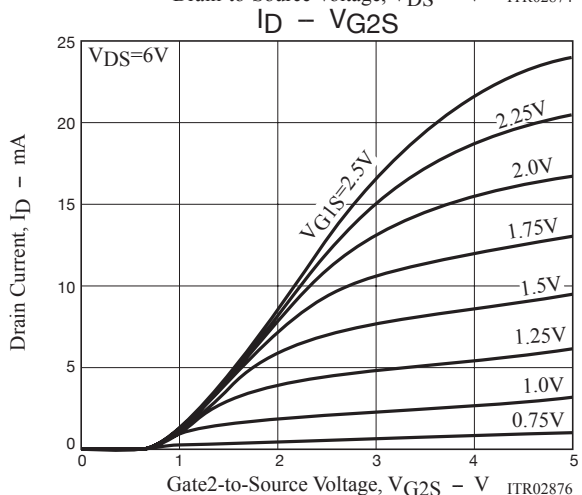
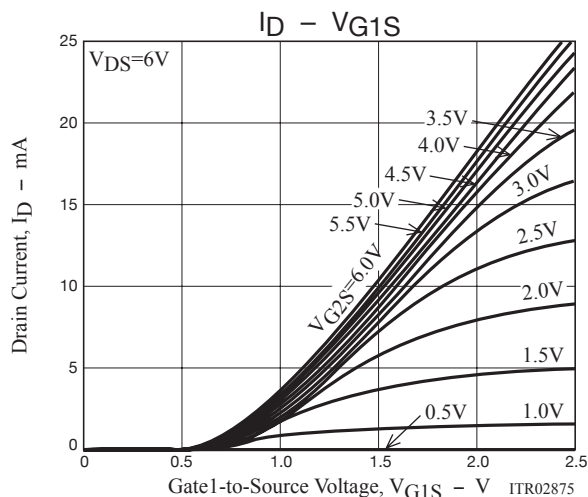
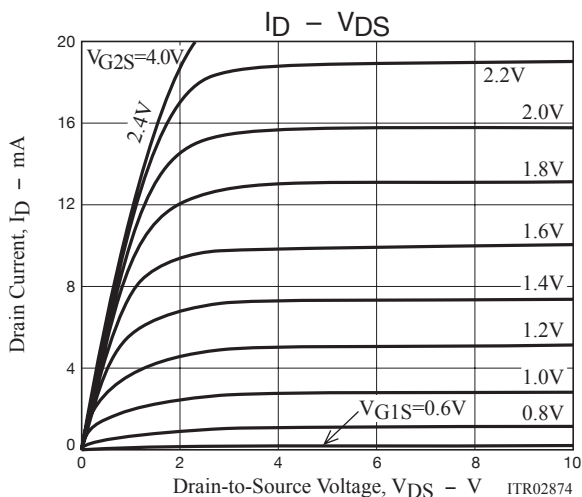
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

## PG, NF Specified Test Circuit



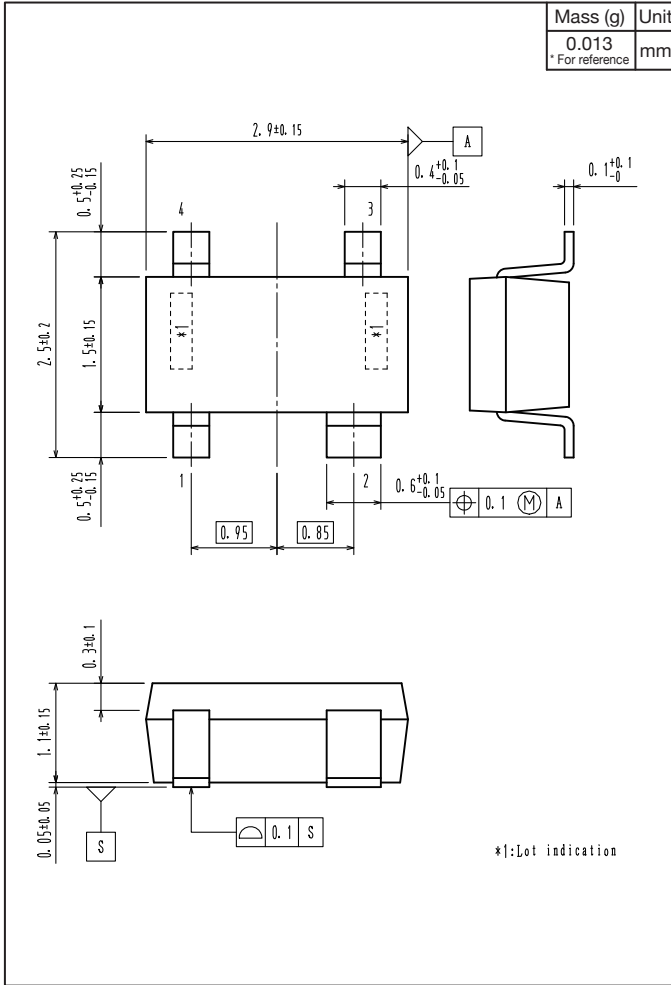
## Ordering Information

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

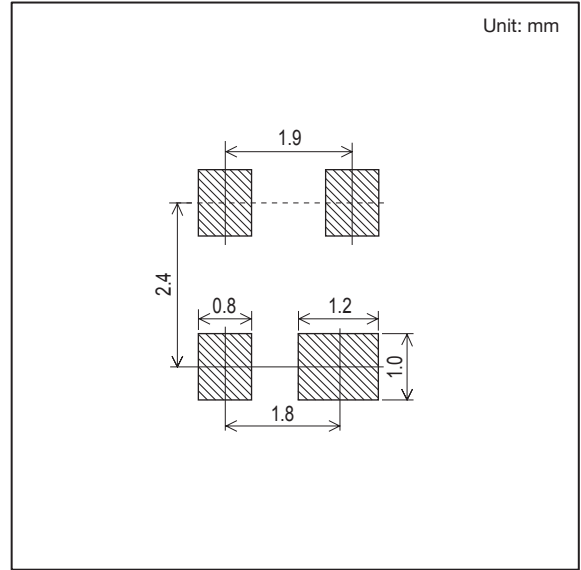


Outline Drawing

3SK263-5-TG-E



Land Pattern Example



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