



3SK264

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

ON Semiconductor®

<http://onsemi.com>

Features

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

Specifications

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

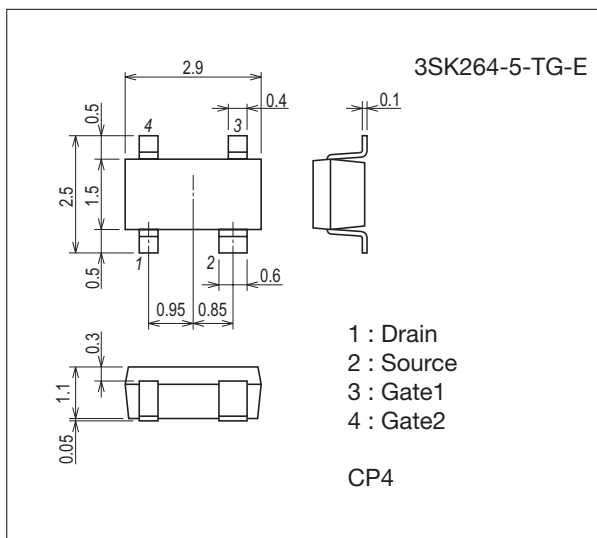
Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DS}		15	V
Gate1-to-Source Voltage	V_{G1S}		± 8	V
Gate2-to-Source Voltage	V_{G2S}		± 8	V
Drain Current	I_D		30	mA
Allowable Power Dissipation	P_D		200	mW
Channel Temperature	T_{ch}		125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55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

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)

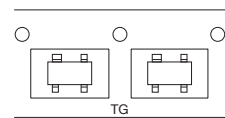
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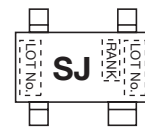
Product & Package Information

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

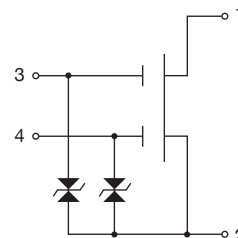
Packing Type: TG



Marking



Electrical Connection



3SK264

Electrical Characteristics at Ta=25°C

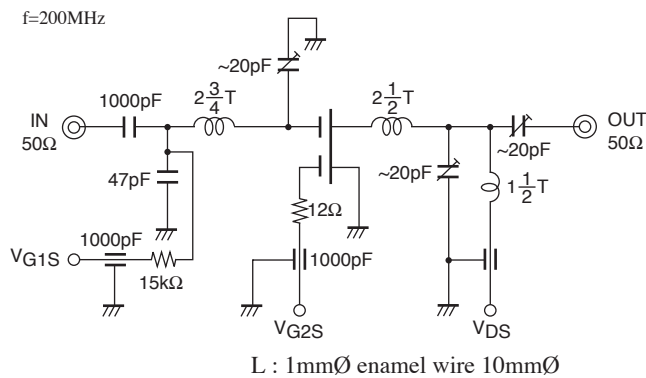
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Voltage	V _{DS}	V _{G1S} =0V, V _{G2S} =0V, I _{DS} =100μA	15			V
Gate1-to-Source Cutoff Voltage	V _{G1S(off)}	V _{DS} =6V, V _{G2S} =4V, I _D =100μA	0	0.7	1.3	V
Gate2-to-Source Cutoff Voltage	V _{G2S(off)}	V _{DS} =6V, V _{G1S} =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		*12	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
I _{DSX}	5.0 to 12.0

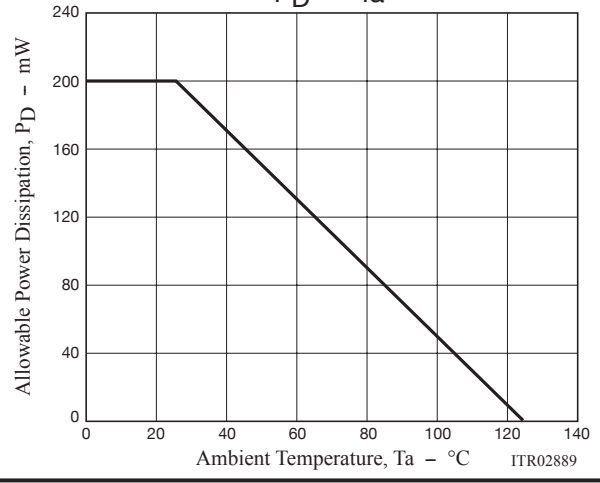
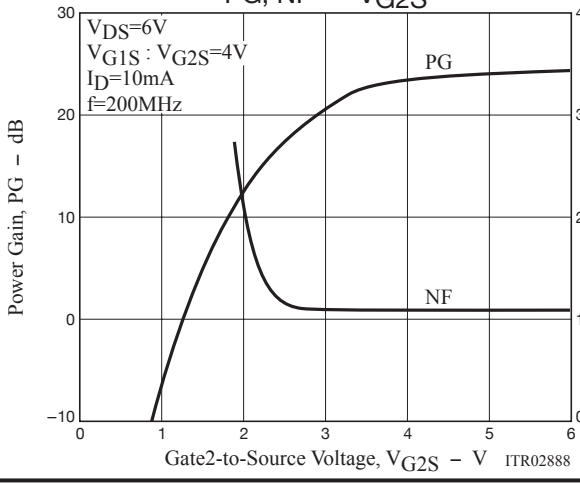
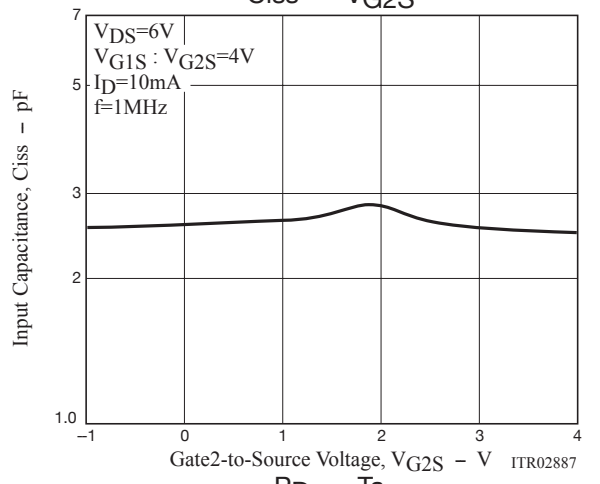
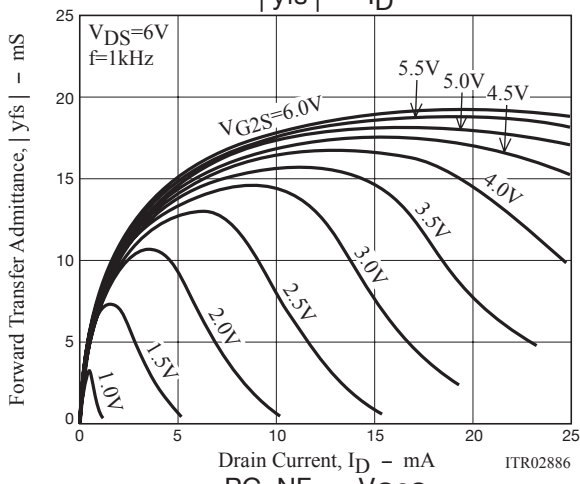
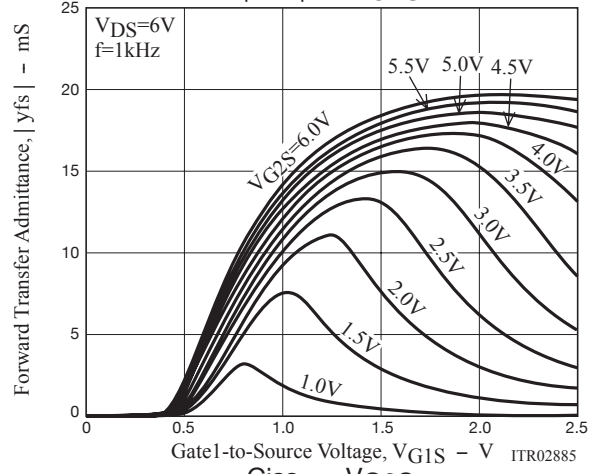
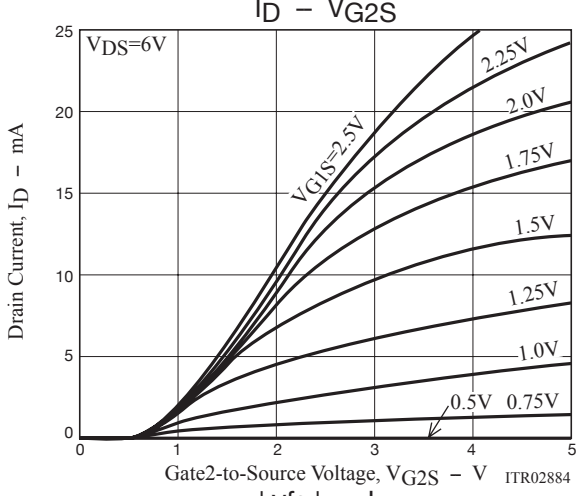
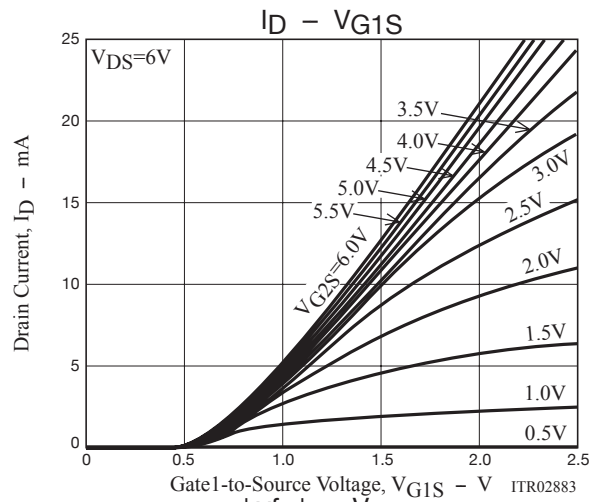
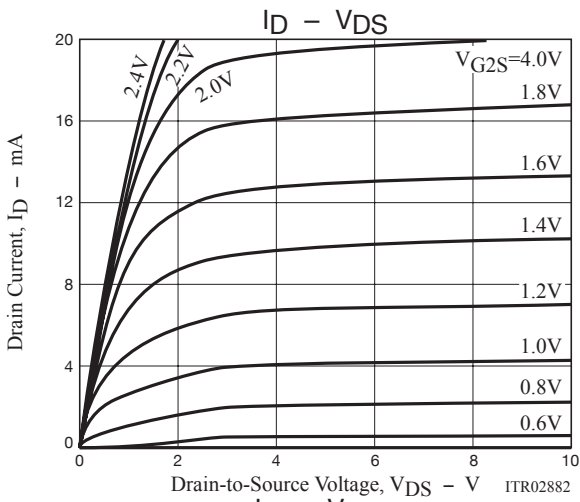
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

PG, NF Specified Test Circuit



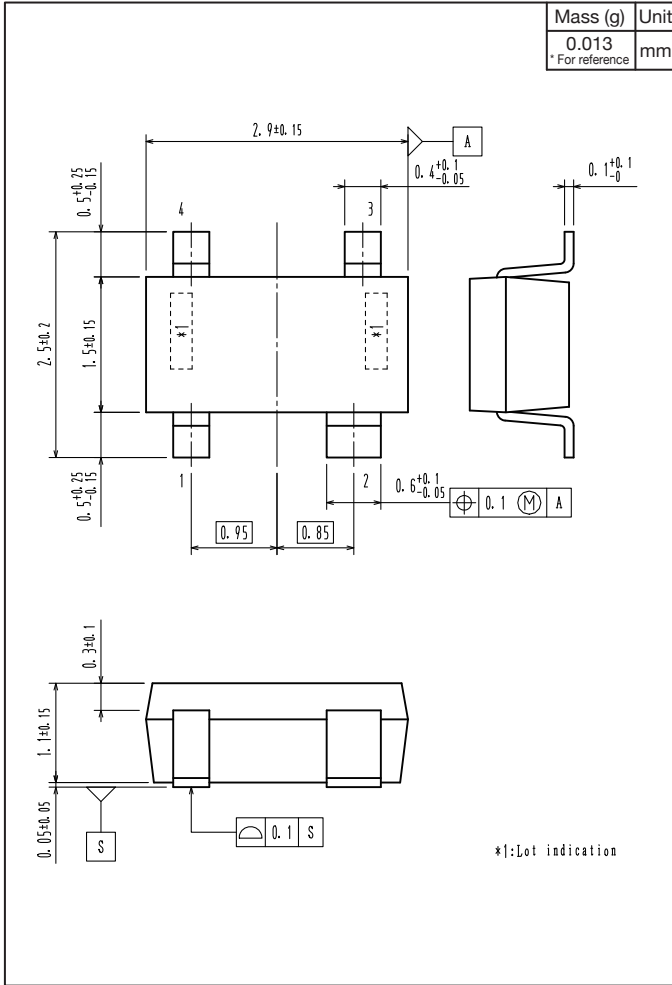
Ordering Information

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

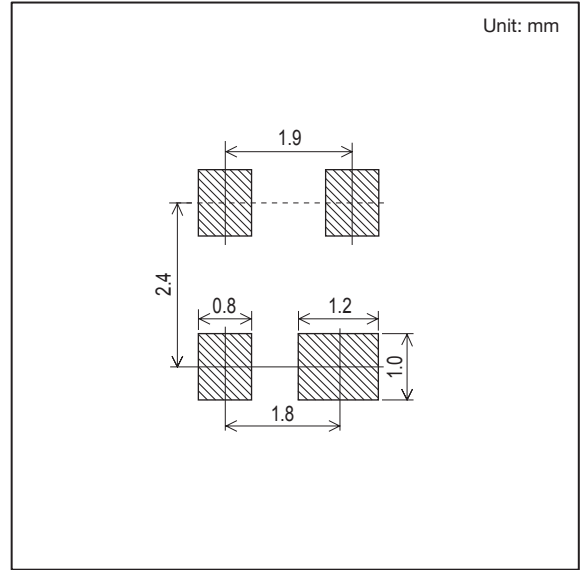


Outline Drawing

3SK264-5-TG-E



Land Pattern Example



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