

# BRD4N65 (CS4N65D)

# N-CHANNEL MOSFET/N 沟道 MOS 晶体管

用途：用于高功率 DC/DC 转换和功率开关。

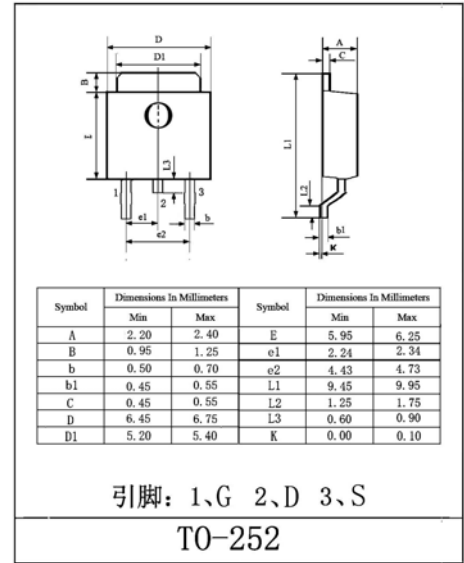
Purpose: These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.

特点：低栅电荷, 低反馈电容, 开关速度快。

Features: Low gate charge, low crss, fast switching.

### 极限参数/Absolute maximum ratings (Ta=25°C)

参数符号 Symbol	数值 Rating	单位 Unit
V <sub>DSS</sub>	650	V
I <sub>D</sub> (Tc=25°C)	4.0	A
I <sub>D</sub> (Tc=100°C)	2.5	A
I <sub>DM</sub>	16	A
V <sub>GSS</sub>	±30	V
E <sub>AS</sub>	240	mJ
E <sub>AR</sub>	10	mJ
I <sub>AR</sub>	4.0	A
P <sub>D</sub> (Tc=25°C)	33	W
T <sub>J</sub> , T <sub>STG</sub>	-55 to 150	°C



### 电性能参数/Electrical Characteristics (Ta=25°C)

参数符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
BV <sub>DSS</sub>	V <sub>GS</sub> =0V I <sub>D</sub> =250 μA	650			V
I <sub>DSS</sub>	V <sub>DS</sub> =650V V <sub>GS</sub> =0V			10	μA
	V <sub>DS</sub> =480V T <sub>C</sub> =125°C			100	μA
I <sub>GSS</sub>	V <sub>GS</sub> =±30V V <sub>DS</sub> =0V			±0.1	μA
V <sub>GS(th)</sub>	V <sub>DS</sub> =V <sub>GS</sub> I <sub>D</sub> =250 μA	2.0		4.0	V
R <sub>DS(on)</sub>	V <sub>GS</sub> =10V I <sub>D</sub> =2.0A		2.0	2.5	Ω
g <sub>FS</sub>	V <sub>DS</sub> =40V I <sub>D</sub> =2.0A		4.7		S
V <sub>SD</sub>	V <sub>GS</sub> =0V I <sub>S</sub> =4.0A			1.4	V
C <sub>iss</sub>	V <sub>DS</sub> =25V V <sub>GS</sub> =0V f=1.0MHz		545	710	pF
C <sub>oss</sub>			60	80	pF
C <sub>rss</sub>			8	11	pF
t <sub>d(on)</sub>	V <sub>DD</sub> =300V I <sub>D</sub> =4.0A R <sub>G</sub> =25 Ω		10	30	ns
t <sub>r</sub>			35	80	ns
t <sub>d(off)</sub>			45	100	ns
t <sub>f</sub>			40	90	ns

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