

RJK2076DPA

200V - 20A - 场效应晶体管
快速电源开关

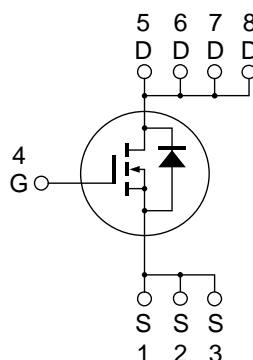
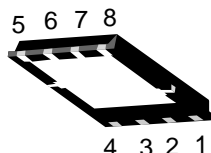
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特点

- 低漏极/源极通态电阻
 $R_{DS(on)} = 0.068 \Omega$ 典型值 ($I_D = 10 A$, $V_{GS} = 10 V$, $T_a = 25^\circ C$)
- 非常低的栅极充电电荷量
 $Q_g = 19 nC$ 典型值 ($V_{DD} = 160 V$, $V_{GS} = 10 V$, $I_D = 20 A$, $T_a = 25^\circ C$)
- 低漏泄电流
- 快速开关时间

封装形式

RENESAS 封装代码: PWSN0008DE-A
(封装名称: WPAK(3F))



1, 2, 3 源极
4 栅极
5, 6, 7, 8 漏极

绝对最大额定值

($T_a = 25^\circ C$)

参数	符号	额定值	单位
漏极/源极电压	V_{DSS}	200	V
栅极/源极电压	V_{GSS}	± 30	V
漏极电流	I_D 注 4	20	A
脉冲漏极电流	I_D (pulse) 注 1	40	A
体二极管反向漏极电流	I_{DR}	20	A
体二极管反向脉冲漏极电流	I_{DR} (pulse) 注 1	40	A
雪崩电流	I_{AP} 注 2	9	A
雪崩能量	E_{AR} 注 2	5.4	mJ
沟道最大容许损耗	P_{ch} 注 3	30	W
沟道-外壳间热阻	θ_{ch-c}	4.17	$^\circ C/W$
沟道温度	T_{ch}	150	$^\circ C$
储存温度	T_{stg}	-55 to +150	$^\circ C$

- 注: 1. 在 $PW \leq 10 \mu s$, 工作周期 $\leq 1\%$ 的容许值
2. $ST_{ch} = 25^\circ C$, $T_{ch} \leq 150^\circ C$
3. 在 $T_c = 25^\circ C$ 的容许值
4. 限于最大安全工作区域

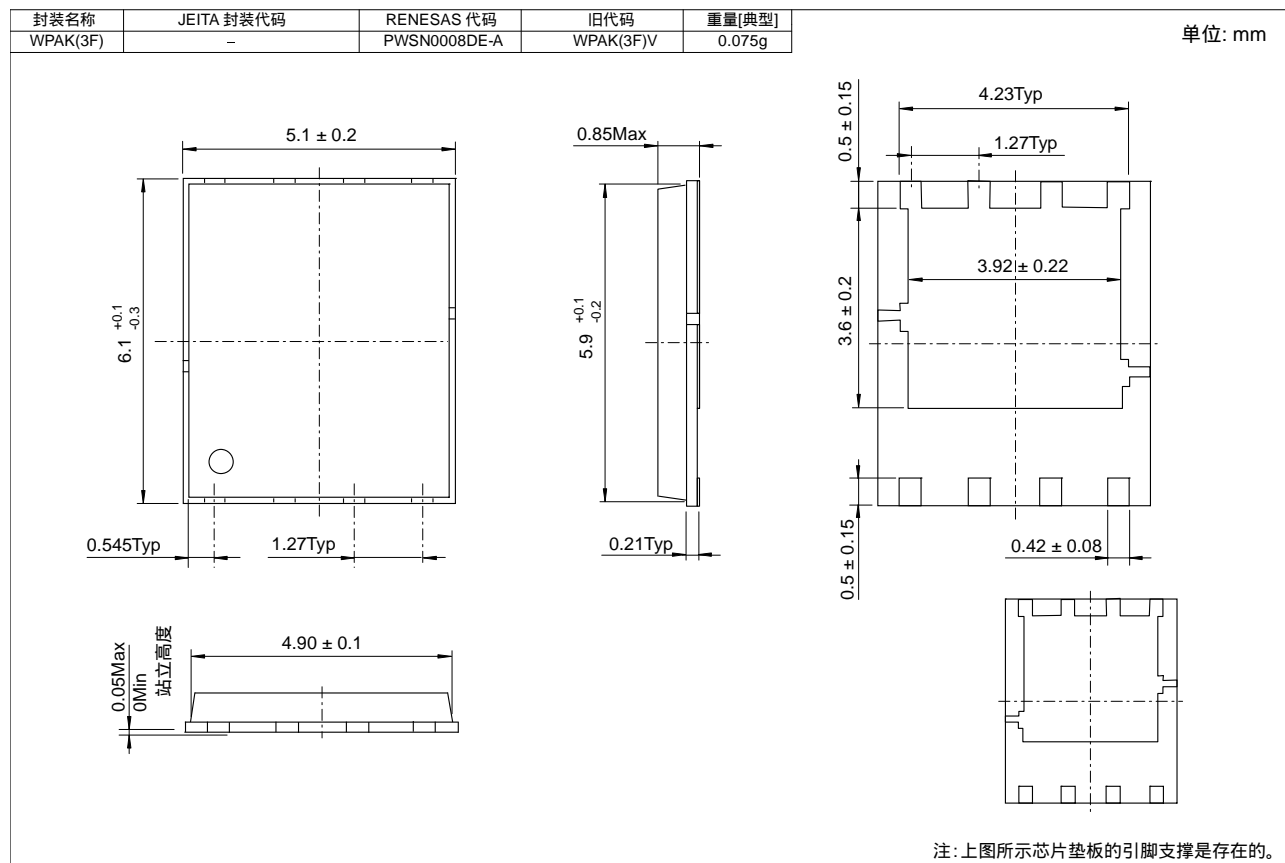
电特性

(Ta = 25°C)

参数	符号	最小值	典型值	最大值	单位	测定条件
漏极/源极破坏电压	$V_{(BR)DSS}$	200	—	—	V	$I_D = 10 \text{ mA}$, $V_{GS} = 0$
漏极截止电流	I_{DSS}	—	—	1	μA	$V_{DS} = 200 \text{ V}$, $V_{GS} = 0$
栅极截止电流	I_{GSS}	—	—	± 1	μA	$V_{GS} = \pm 30 \text{ V}$, $V_{DS} = 0$
栅极/源极截止电压	$V_{GS(off)}$	2.5	—	4.5	V	$V_{DS} = 10 \text{ V}$, $I_D = 1 \text{ mA}$
静态漏极/源极通态电阻	$R_{DS(on)}$	—	0.068	0.085	Ω	$I_D = 10 \text{ A}$, $V_{GS} = 10 \text{ V}$ ^{注5}
输入电容	C_{iss}	—	1200	—	pF	$V_{DS} = 25 \text{ V}$ $V_{GS} = 0$ $f = 1 \text{ MHz}$
输出电容	C_{oss}	—	200	—	pF	
反向传输电容	C_{rss}	—	30	—	pF	
接通延迟时间	$t_{d(on)}$	—	25	—	ns	$I_D = 10 \text{ A}$ $V_{GS} = 10 \text{ V}$ $R_L = 10 \Omega$ $R_g = 10 \Omega$
上升时间	t_r	—	16	—	ns	
关断延迟时间	$t_{d(off)}$	—	42	—	ns	
下降时间	t_f	—	12	—	ns	
栅极充电电荷量	Q_g	—	19	—	nC	$V_{DD} = 160 \text{ V}$ $V_{GS} = 10 \text{ V}$ $I_D = 20 \text{ A}$
栅极/源极充电电荷量	Q_{gs}	—	6	—	nC	
栅极/漏极充电电荷量	Q_{gd}	—	6	—	nC	
体二极管正向电压	V_{DF}	—	0.91	1.35	V	$I_F = 20 \text{ A}$, $V_{GS} = 0$ ^{注5}
体二极管反向恢复时间	t_{rr}	—	115	—	ns	$I_F = 20 \text{ A}$, $V_{GS} = 0$ $di_F/dt = 100 \text{ A}/\mu\text{s}$

注: 5. 脉冲测试

封装尺寸



订购信息

订购型号	数量	运输包装
RJK2076DPA-00#J5A	3000 枚	带卷包装

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