RJK6034DPD-E0

600 V - 1 A – 场效应晶体管
快速电源开关

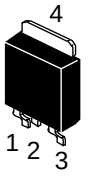
R07DS0553CJ0100
修订版本 1.00
Dec 05, 2011

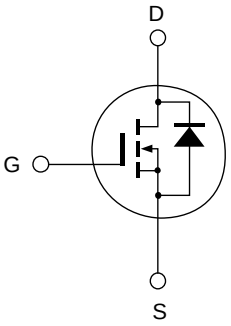
特点

- 低通态电阻
  $R_{DS(on)}$ = 9.8 Ω 典型值 (I_D = 0.5 A, V_{GS} = 10 V, Ta = 25°C)
- 低漏电流
- 快速开关时间

封装形式

RENESAS 封装代码: PRSS0004ZJ-A
(封装名称 : TO-252)





1. 栅极
2. 漏极
3. 源极
4. 漏极

绝对最大额定值

(Ta = 25°C)

参数	符号	额定值	单位
漏极/源极电压	V_{DSS}	600	V
栅极/源极电压	V_{GSS}	±30	V
漏极电流	I_D	1	A
脉冲漏极电流	$I_{D\ (pulse)}$ 注 1	2	A
雪崩电流	I_{AP} 注 3	1	A
沟道最大容许损耗	Pch 注 2	36.7	W
沟道-外壳间热阻	θch-c	3.4	°C/W
沟道温度	Tch	150	°C
储存温度	Tstg	–55 to +150	°C

注:
1. 脉冲宽度限于安全工作区域
2. 在 Tc = 25°C 的容许值
3. STch = 25°C, Tch ≤ 150°C

电特性

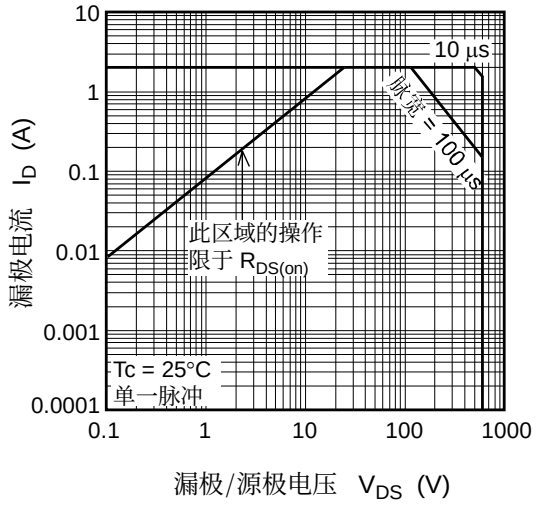
(Ta = 25°C)

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	$V_{(BR)DSS}$	600	—	—	V	I_D = 10 mA, V_{GS} = 0
漏极截止电流	I_{DSS}	—	—	1	μA	V_{DS} = 600 V, V_{GS} = 0
栅极截止电流	I_{GSS}	—	—	±0.1	μA	V_{GS} = ±30 V, V_{DS} = 0
栅极/源极截止电压	$V_{GS(off)}$	3.0	—	4.5	V	I_D = 1 mA, V_{DS} = 10 V
漏极/源极通态电阻	$R_{DS(on)}$	—	9.8	12.2	Ω	I_D = 0.5 A, V_{GS} = 10 V 注 4
输入电容	Ciss	—	115	—	pF	V_{DS} = 25 V V_{GS} = 0 f = 1 MHz
输出电容	Coss	—	14	—	pF	
反向传输电容	Crss	—	1.7	—	pF	
接通延迟时间	$t_{d(on)}$	—	12	—	ns	I_D = 0.5 A V_{GS} = 10 V R_L = 600 Ω Rg = 10 Ω
上升时间	t_r	—	14	—	ns	
关断延迟时间	$t_{d(off)}$	—	22	—	ns	
下降时间	t_f	—	65	—	ns	
总栅极充电电荷量	Qg	—	5.9	—	nC	V_{DD} = 480 V V_{GS} = 10 V I_D = 1 A
栅极/源极充电电荷量	Qgs	—	1.0	—	nC	
栅极/漏极充电电荷量	Qgd	—	3.6	—	nC	
体二极管正向电压	V_{DF}	—	0.9	1.5	V	I_F = 1 A, V_{GS} = 0 注 4
体二极管反向恢复时间	t_{rr}	—	225	—	ns	IF = 1 A, V_{GS} = 0 diF/dt = –100 A/μs

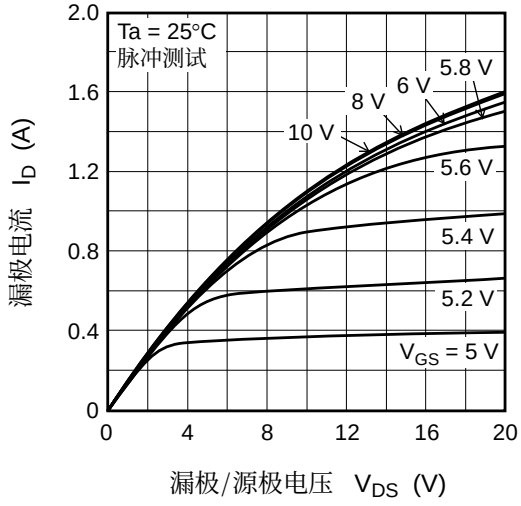
注: 4. 脉冲测试

主要特性

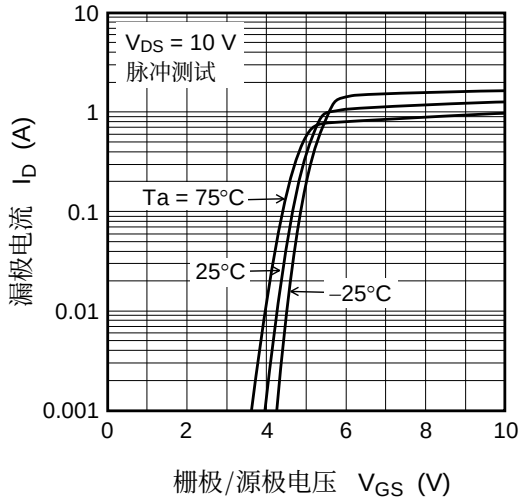
最大安全工作区域



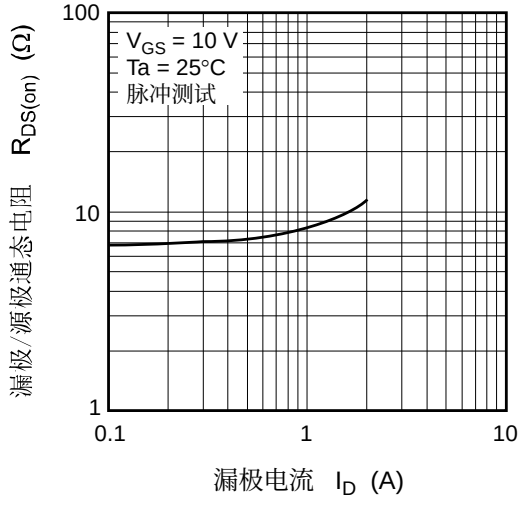
典型输出特性



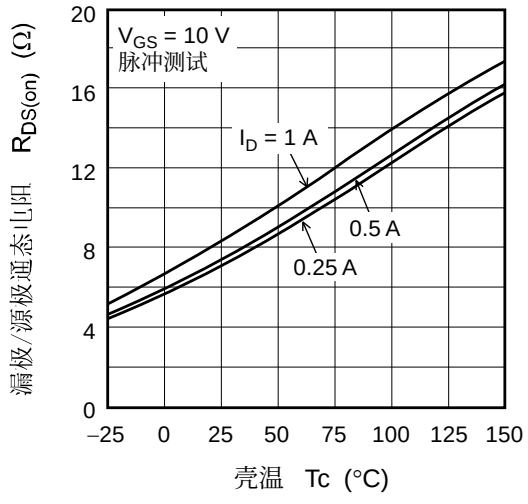
典型传输特性



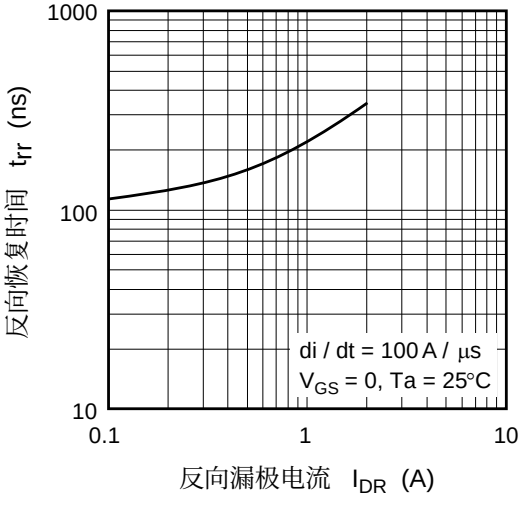
漏极/源极通态电阻-漏极电流 (典型)



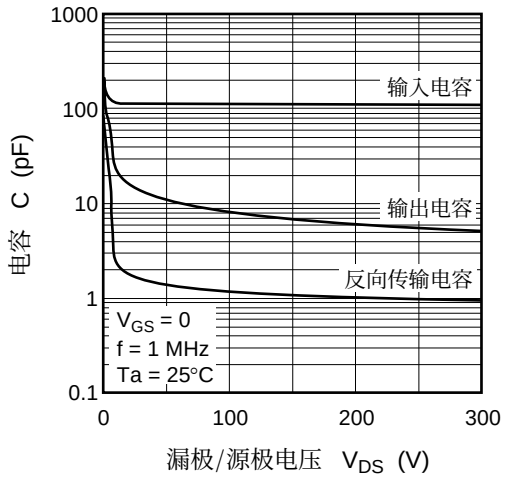
漏极/源极通态电阻-壳温 (典型)



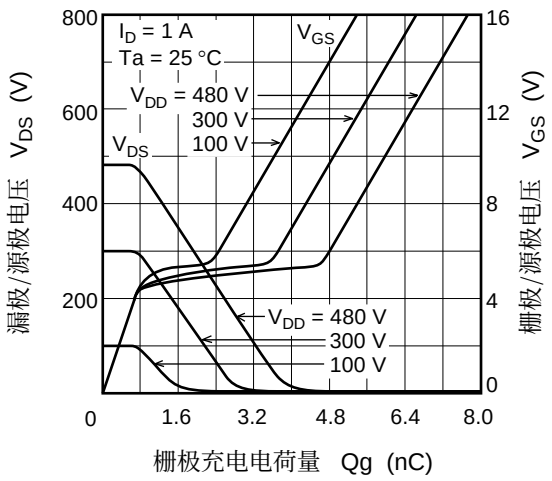
体二极管反向恢复时间 (典型)



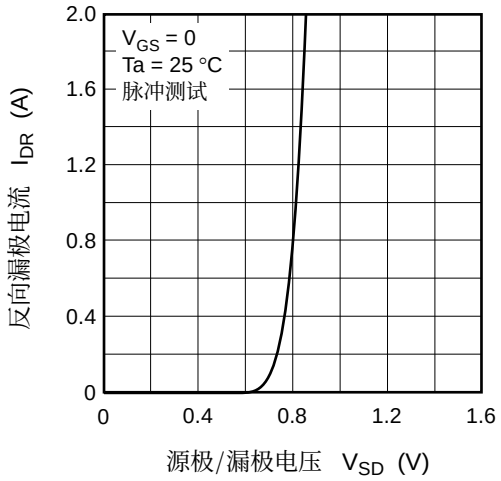
典型电容-漏极/源极电压 (典型)



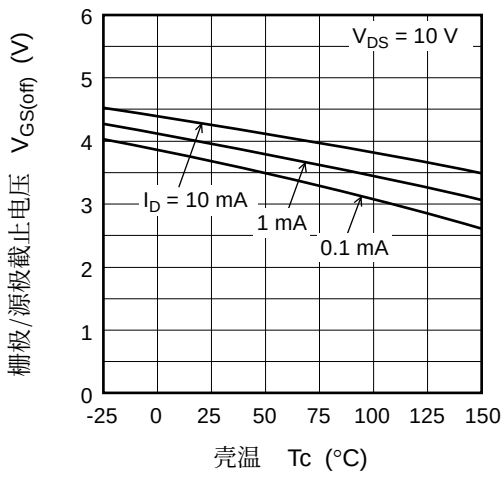
输入时序特性 (典型)



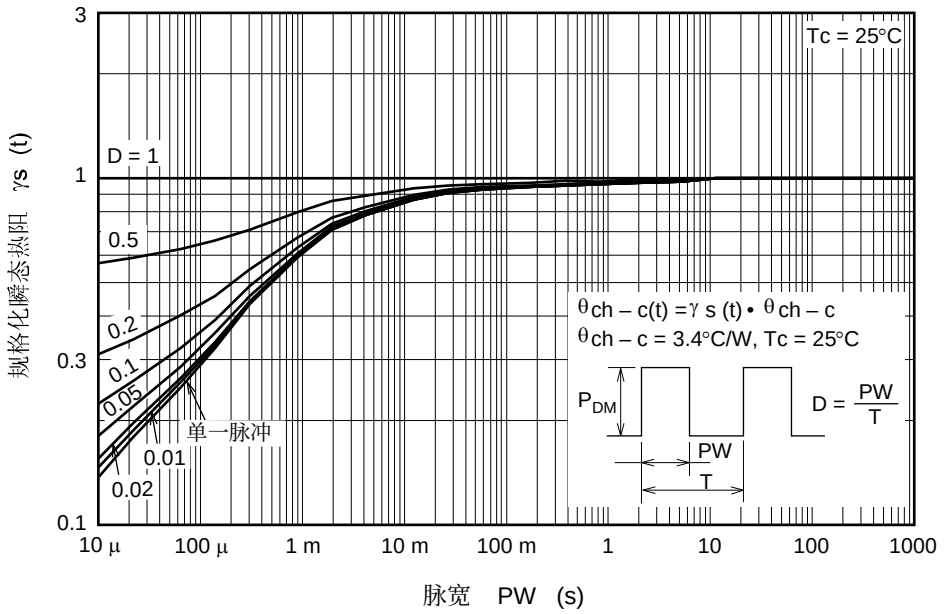
反向漏极电流-源极/漏极电压 (典型)



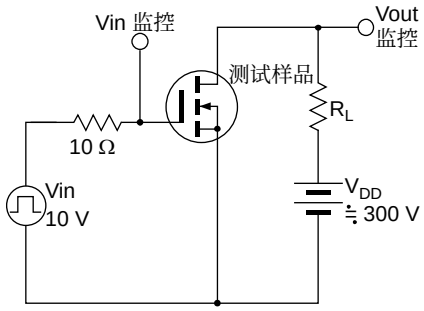
栅极/源极截止电压-壳温 (典型)



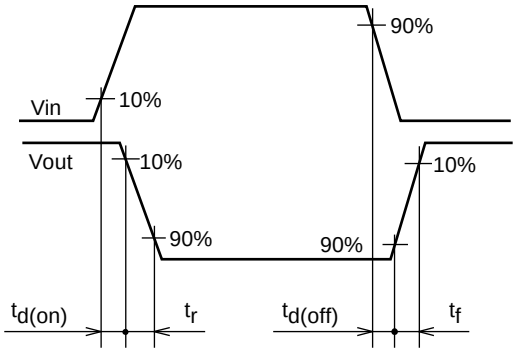
瞬态热阻特性规格化-脉宽



开关时间测定电路



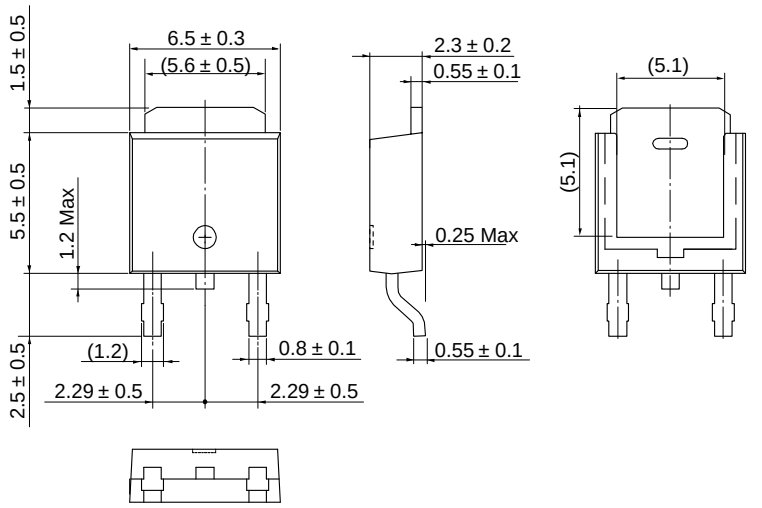
运行波形



封装尺寸

封装名称	JEITA 封装代码	RENESAS 代码	旧代码	重量[典型]
TO-252	––	PRSS0004ZJ-A	——	0.319g

单位: mm



订购信息

订购型号	数量	运输包装
RJK6034DPD-E0#J2	3000 枚	带卷包装

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Renesas Electronics America Inc.
2880 Scott Boulevard Santa Clara, CA 95050-2554, U.S.A.
Tel: +1-408-588-6000, Fax: +1-408-588-6130

Renesas Electronics Canada Limited
1101 Nicholson Road, Newmarket, Ontario L3Y 9C3, Canada
Tel: +1-905-898-5441, Fax: +1-905-898-3220

Renesas Electronics Europe Limited
Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K
Tel: +44-1628-585-100, Fax: +44-1628-585-900

Renesas Electronics Europe GmbH
Arcadiastrasse 10, 40472 Düsseldorf, Germany
Tel: +49-211-65030, Fax: +49-211-6503-1327

Renesas Electronics (China) Co., Ltd.
7th Floor, Quantum Plaza, No.27 ZhiChunLu Haidian District, Beijing 100083, P.R.China
Tel: +86-10-8235-1155, Fax: +86-10-8235-7679

Renesas Electronics (Shanghai) Co., Ltd.
Unit 204, 205, AZIA Center, No.1233 Lujiazui Ring Rd., Pudong District, Shanghai 200120, China
Tel: +86-21-5877-1818, Fax: +86-21-6887-7858 / -7898

Renesas Electronics Hong Kong Limited
Unit 1601-1613, 16/F., Tower 2, Grand Century Place, 193 Prince Edward Road West, Mongkok, Kowloon, Hong Kong
Tel: +852-2886-9318, Fax: +852 2886-9022/9044

Renesas Electronics Taiwan Co., Ltd.
13F, No. 363, Fu Shing North Road, Taipei, Taiwan
Tel: +886-2-8175-9600, Fax: +886 2-8175-9670

Renesas Electronics Singapore Pte. Ltd.
1 harbourFront Avenue, #06-10, keppel Bay Tower, Singapore 098632
Tel: +65-6213-0200, Fax: +65-6278-8001

Renesas Electronics Malaysia Sdn.Bhd.
Unit 906, Block B, Menara Amcorp, Amcorp Trade Centre, No. 18, Jln Persiaran Barat, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia
Tel: +60-3-7955-9390, Fax: +60-3-7955-9510

Renesas Electronics Korea Co., Ltd.
11F., Samik Lavied' or Bldg., 720-2 Yeoksam-Dong, Kangnam-Ku, Seoul 135-080, Korea
Tel: +82-2-558-3737, Fax: +82-2-558-5141

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