FC5516010R

Dual N-channel MOSFET

For switching

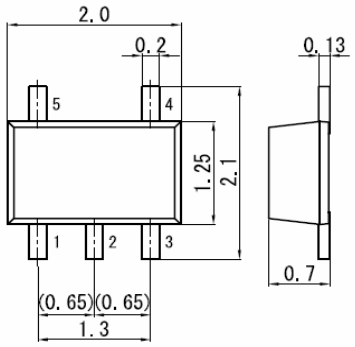
■ Features
- Low drive voltage: 2.5 V drive
- Halogen-free / RoHS compliant
  (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

■ Marking Symbol: V5

■ Basic Part Number
Dual FK350601 (Source Common type)

■ Packaging
FC5516010R Embossed type (Thermo-compression sealing):
3 000 pcs / reel (standard)

Unit: mm



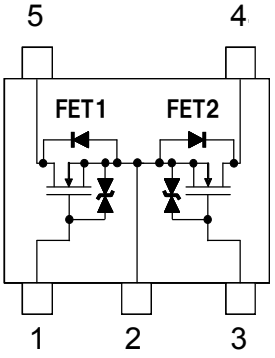
1. Gate(FET1)
2. Source(FET1,2)
3. Gate(FET2)
4. Drain(FET2)
5. Drain(FET1)

Panasonic	SMini5-F3-B
JEITA	SC-113CB
Code	SOT-353

■ Absolute Maximum Ratings Ta = 25 °C

Parameter		Symbol	Rating	Unit
FET1 FET2	Drain-source Voltage	VDS	60	V
	Gate-source Voltage	VGS	±12	V
	Drain current	ID	100	mA
	Drain current (Pulsed)	IDp	200	mA
Overall	Total power dissipation	PD	150	mW
	Channel temperature	Tch	150	°C
	Storage temperature	Tstg	-55 to +150	°C

Internal Connection



Pin name

1. Gate(FET1)
2. Source(FET1,2)
3. Gate(FET2)
4. Drain(FET2)
5. Drain(FET1)

■ Electrical Characteristics Ta = 25 °C ± 3 °C
FET1,FET2

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Drain-source Breakdown Voltage	VDSS	ID = 1.0 mA, VGS = 0 V	60			V
Zero Gate Voltage Drain Current	IDSS	VDS = 60 V, VGS = 0 V			1.0	μA
Gate-source Leakage Current	IGSS	VGS = ±10 V, VDS = 0 V			±10	μA
Gate-source Threshold Voltage	Vth	ID = 1.0 μA, VDS = 3.0 V	0.9	1.2	1.5	V
Drain-source On-state Resistance	RDS(on)1	ID = 10 mA, VGS = 2.5 V		8	15	Ω
	RDS(on)2	ID = 10 mA, VGS = 4.0 V		6	12	
Forward transfer admittance	|Yfs|	ID = 10 mA, VDS = 3.0 V	20	60		mS
Input Capacitance	Ciss	VDS = 3 V, VGS = 0 V, f = 1 MHz		12		pF
Output Capacitance	Coss			7		
Reverse Transfer Capacitance	Crss			3		
Turn-on time *1	ton	VDD = 3 V, VGS = 0 V to 3 V ID = 10 mA		100		ns
Turn-off time *1	toff	VDD = 3 V, VGS = 3 V to 0 V ID = 10 mA		100		ns

Note Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.

*1 See Test circuit

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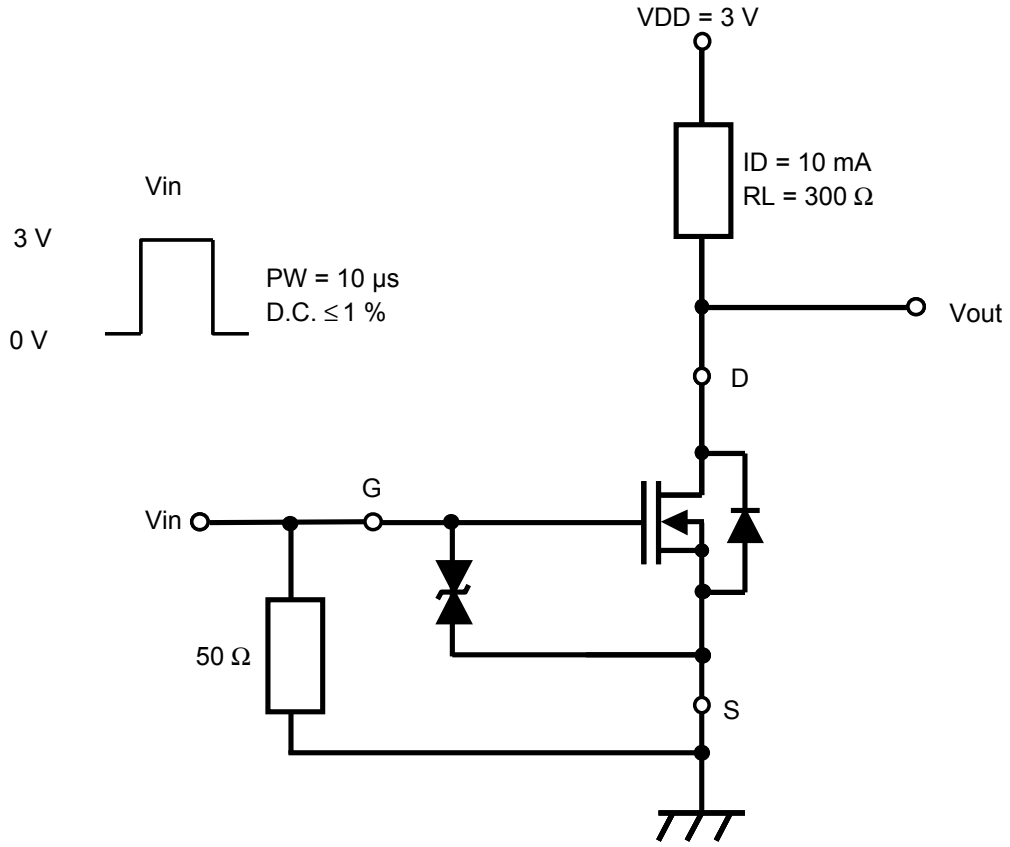
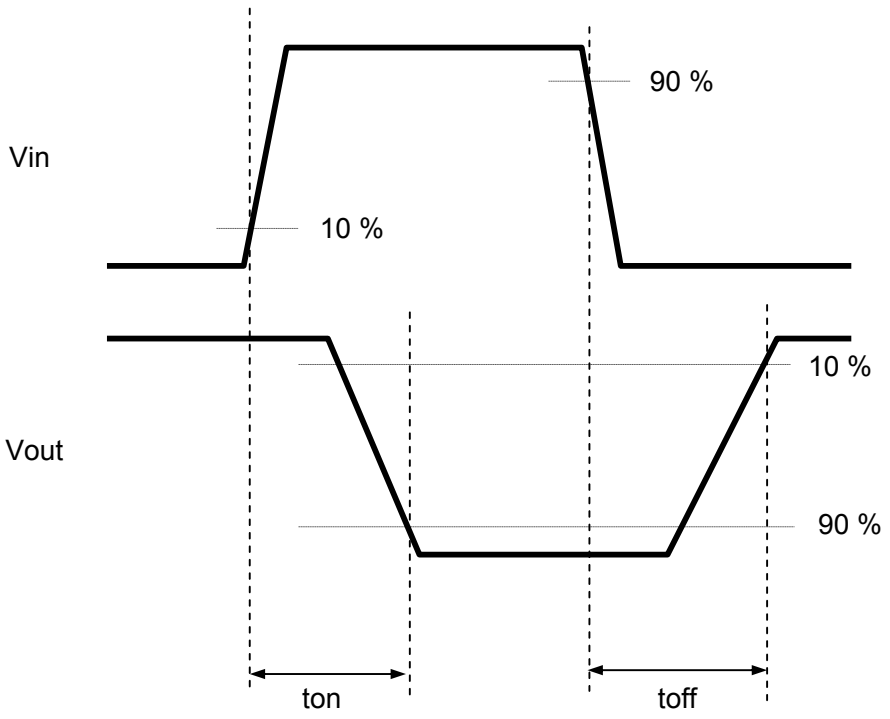
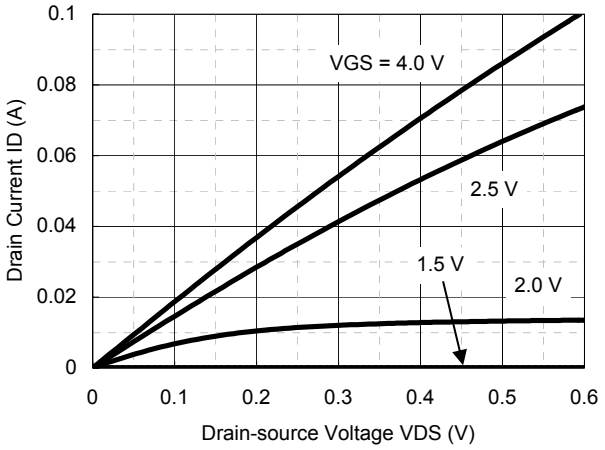
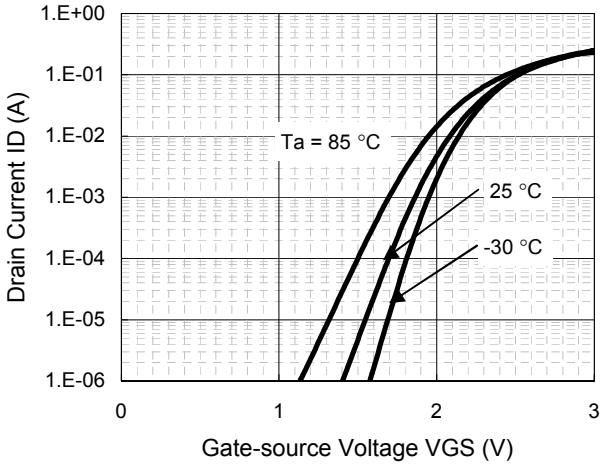


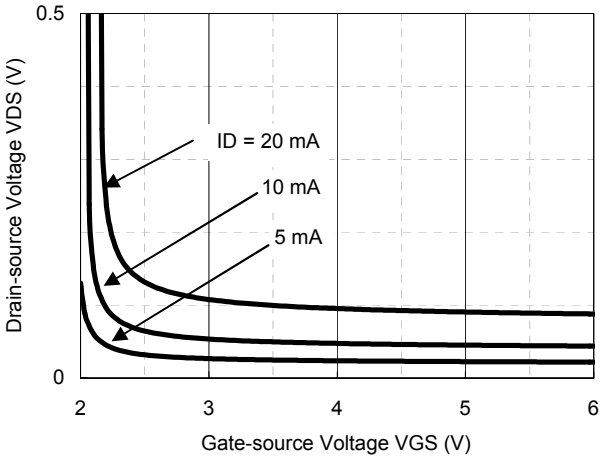




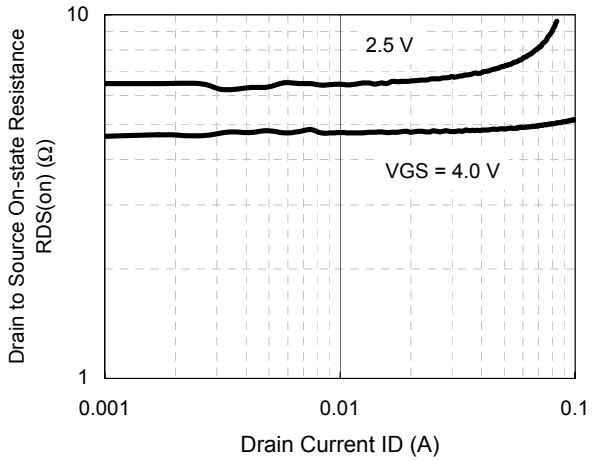
ID - VDS



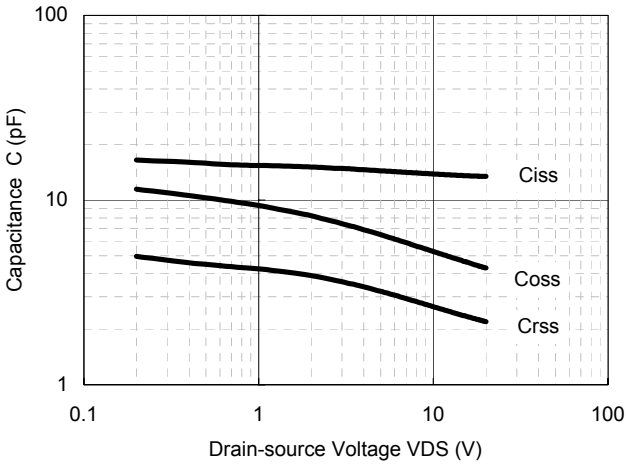
ID - VGS



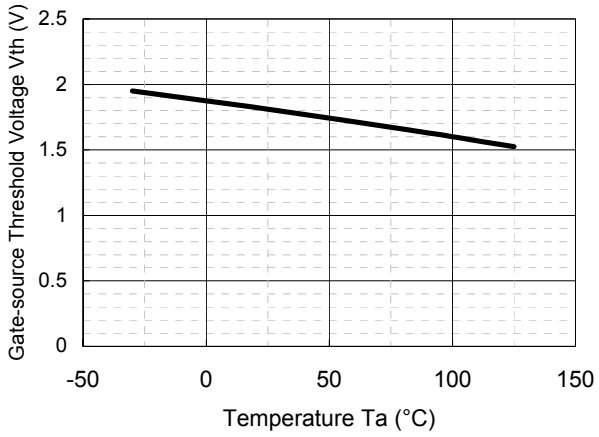
VDS - VGS



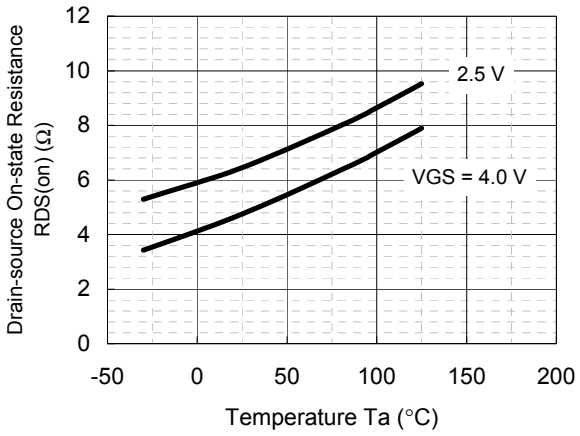
RDS(on) - ID



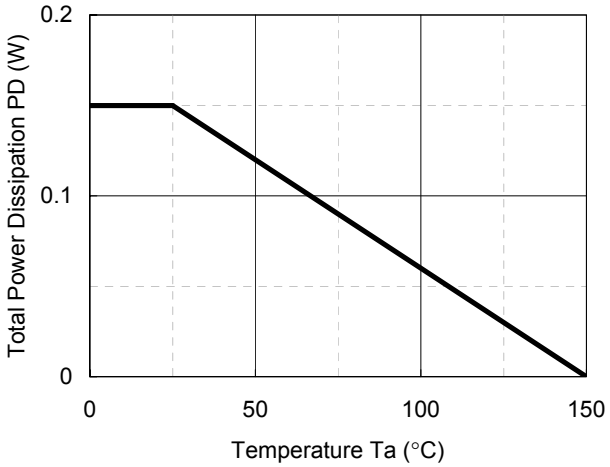
Capacitance - VDS



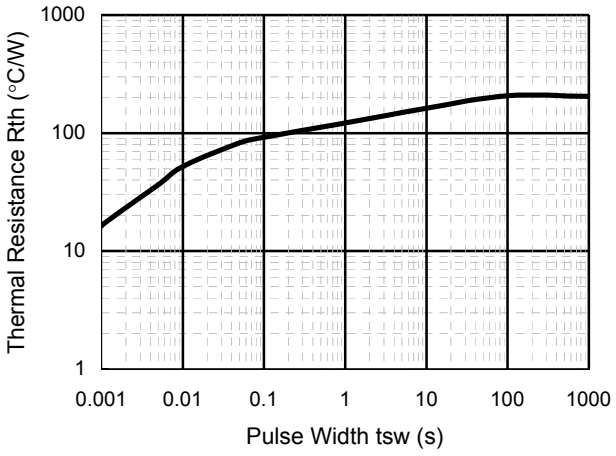
Vth - Ta



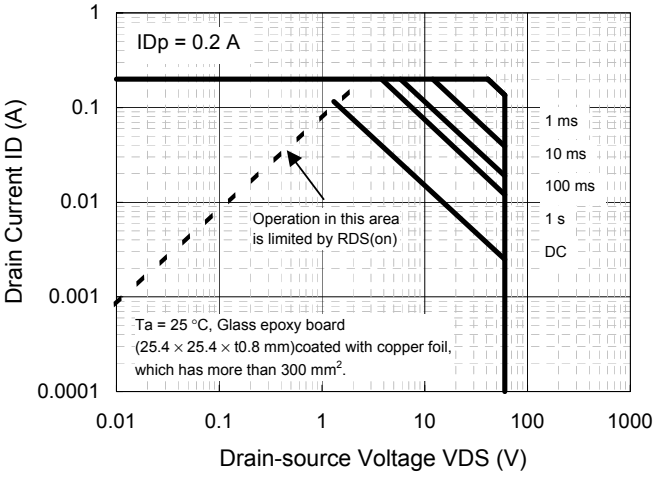
RDS(on) - Ta



PD - Ta



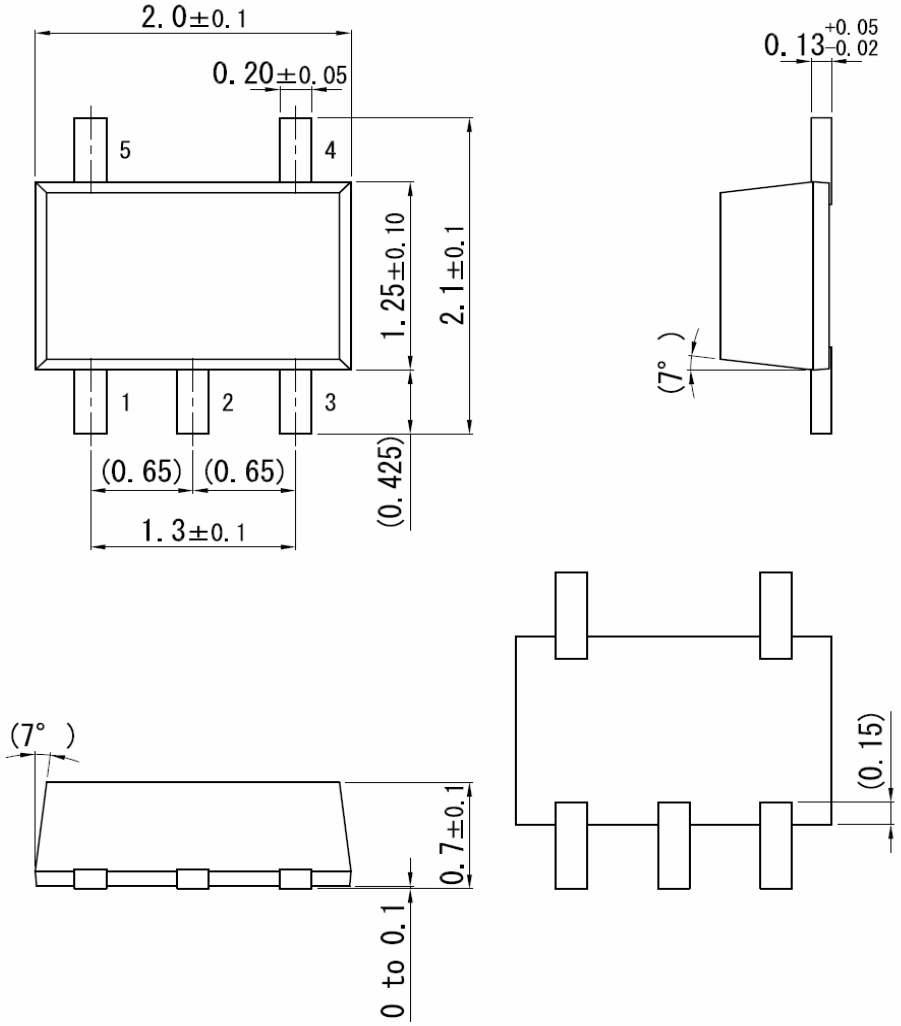
Rth -tsw



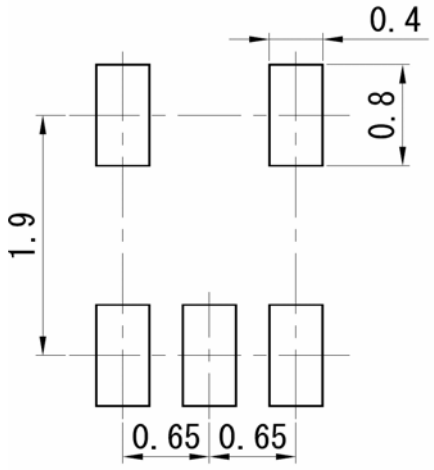
Safe Operating Area

SMini5-F3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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