



FC6943010R
Dual N-channel MOS FET

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 : V4

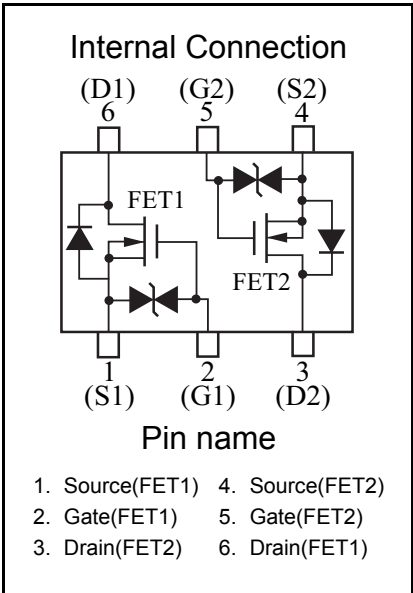
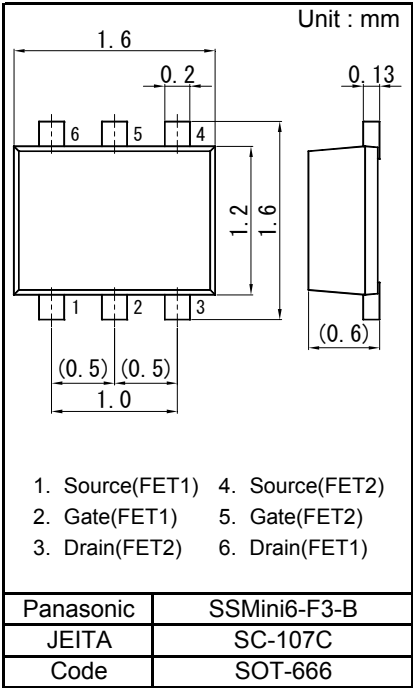
■ Basic Part Number : Dual FK330301 (Individual)

■ Packaging

Embossed type (Thermo-compression sealing): 8 000 pcs / reel (standard)

■ Absolute Maximum Ratings Ta = 25 °C

	Parameter	Symbol	Rating	Unit
FET1	Drain-source Voltage	VDSS	30	V
	Gate-source Voltage	VGSS	±12	V
	Drain current	ID	100	mA
	Pulse drain current	IDp	200	mA
FET2	Drain current	ID	100	mA
	Pulse drain current	IDp	200	mA
	Total power dissipation	PT	125	mW
	Channel temperature	Tch	150	°C
Overall	Operating ambient temperature	Topr	-40 to +85	°C
	Storage temperature	Tstg	-55 to +150	°C



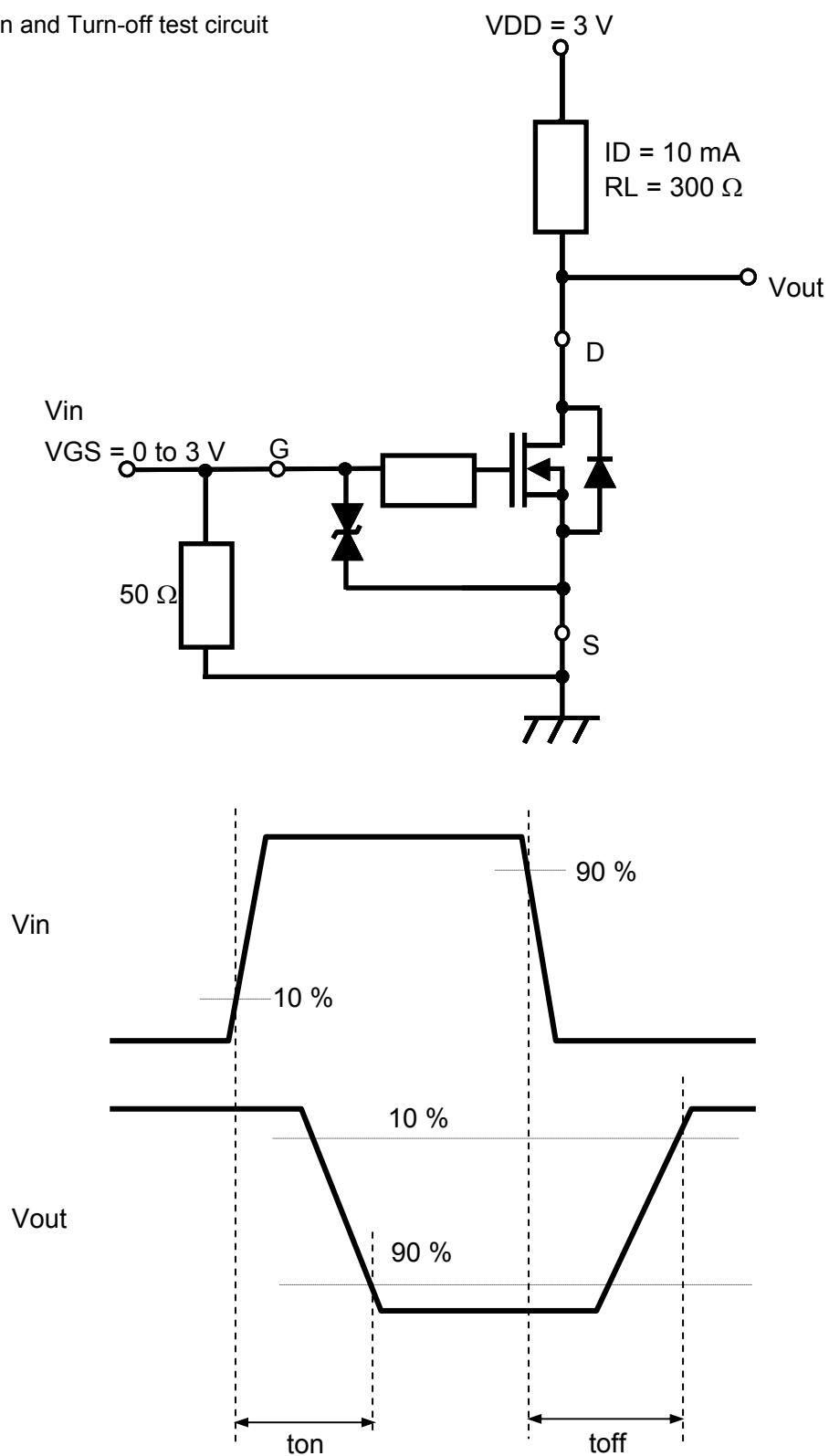
■ Electrical Characteristics Ta = 25 °C ± 3 °C
FET1,FET2

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Drain-source breakdown voltage	VDSS	ID = 1 mA, VGS = 0	30			V
Drain-source cutoff current	IDSS	VDS = 30 V, VGS = 0			1.0	μA
Gate-source cutoff current	IGSS	VGS = ±10 V, VDS = 0			±10	μA
Gate threshold voltage	VTH	ID = 1.0 μA, VDS = 3.0 V	0.5	1.0	1.5	V
Drain-source ON resistance	RDS(on)1	ID = 10 mA, VGS = 2.5 V		3	6	Ω
	RDS(on)2	ID = 10 mA, VGS = 4.0 V		2	3	Ω
Forward transfer admittance	Yfs	ID = 10 mA, VDS = 3.0 V	20	55		mS
Input capacitance	Ciss	VDS = 3 V, VGS = 0, f = 1 MHz		12		pF
Output capacitance	Coss			7		pF
Reverse transfer capacitance	Crss			3		pF
Turn-on time *1	ton	VDD = 3 V, VGS = 0 to 3 V ID = 10 mA		100		ns
Turn-off time *1	toff	VDD = 3 V, VGS = 3 to 0 V ID = 10 mA		100		ns

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.

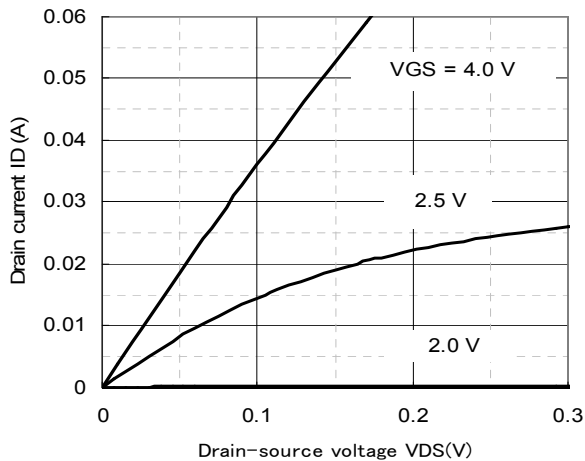
2. *1 Turn-on and Turn-off test circuit

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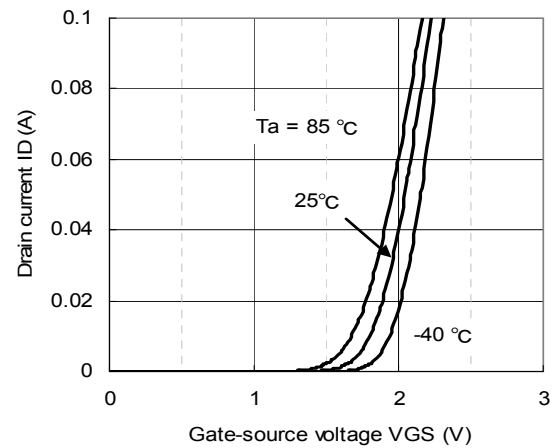


Technical Data (reference)

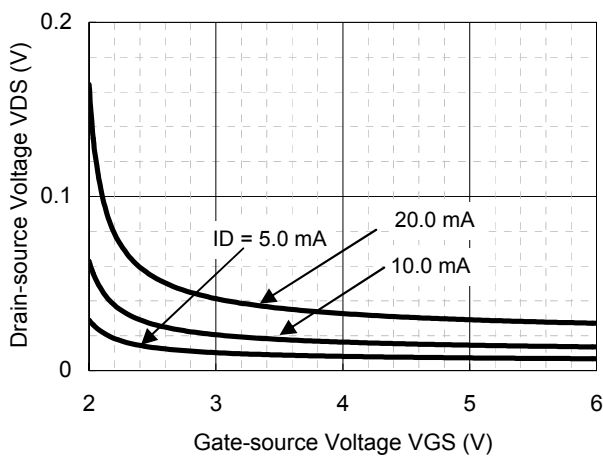
ID - VDS



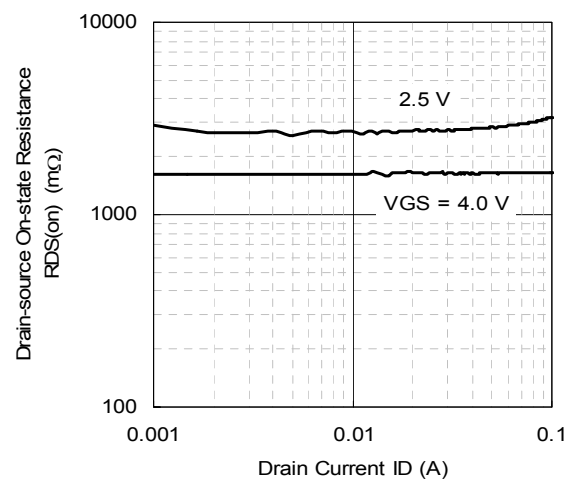
ID - VGS



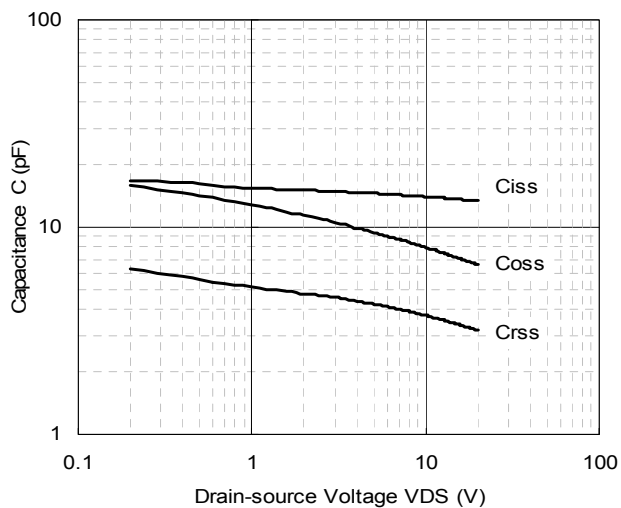
VDS - VGS



RDS(on) - ID

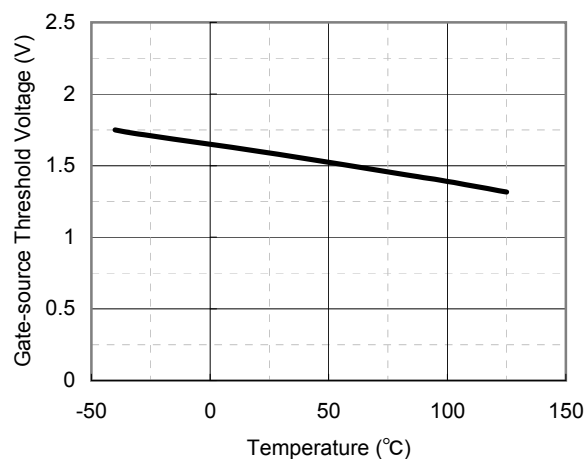


Capacitance - VDS

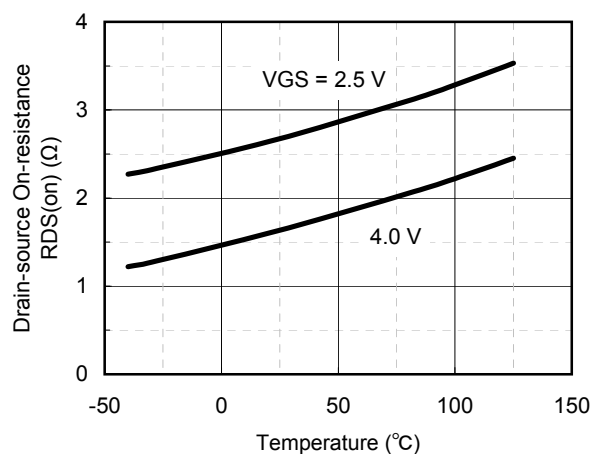


Technical Data (reference)

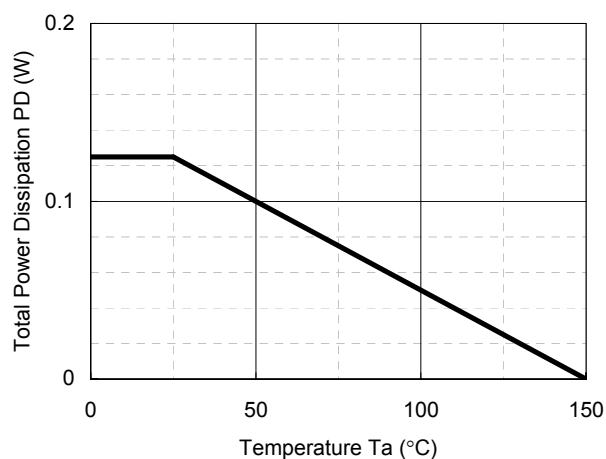
V_{th} - T_a



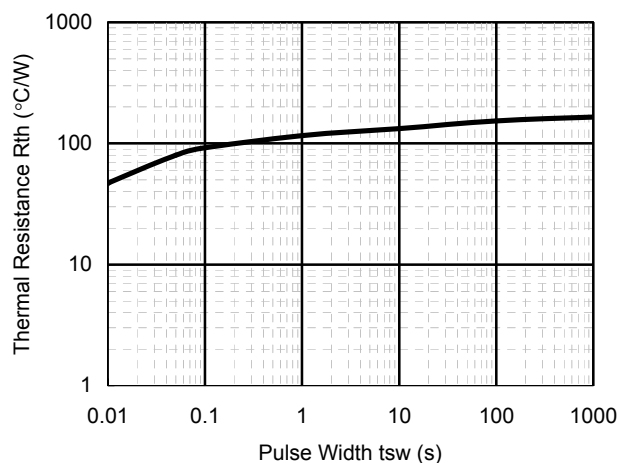
R_{DS(on)} - T_a



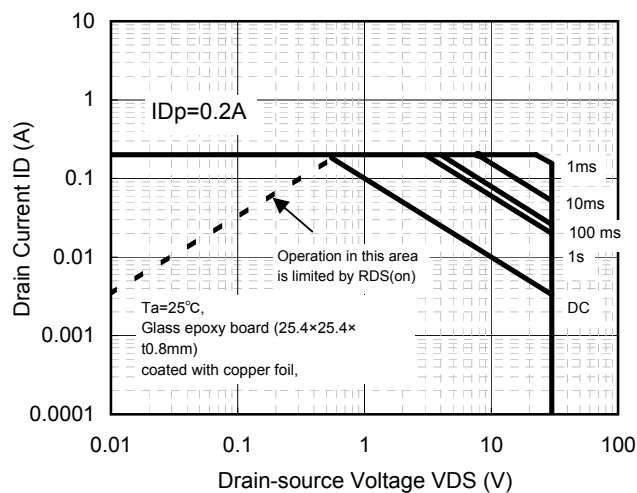
PD - T_a



R_{th} - t_{sw}



Safe Operating Area

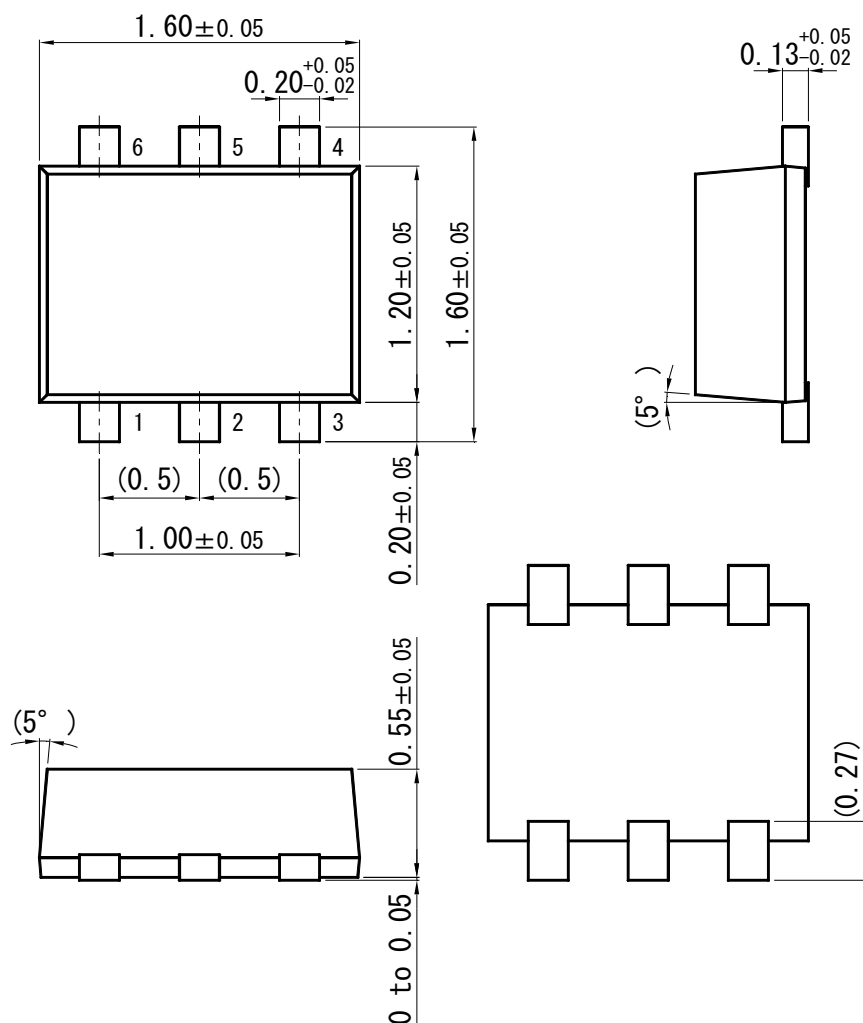


Panasonic

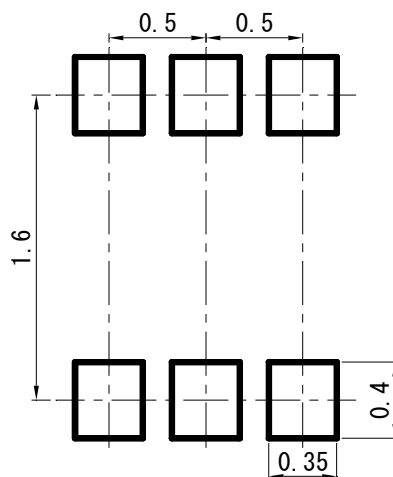
MOS FET
FC6943010R

SSMini6-F3-B

Unit: mm



■ Land Pattern (Reference) (Unit : mm)



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