

Silicon P-channel MOSFET

For switching
FJ350301 in SSSMini3 type package

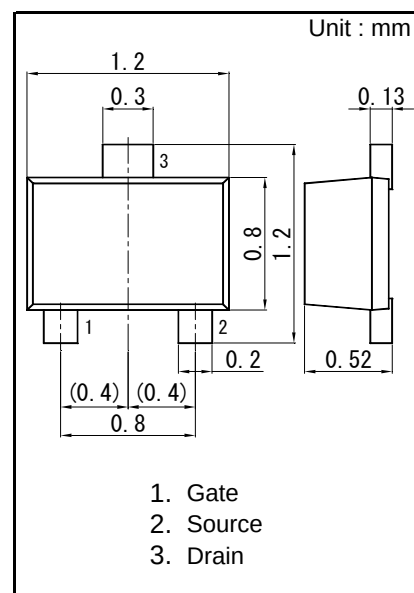
- Low drive voltage : 2.5 V drive
- Halogen-free / RoHS compliant
(EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

■ Marking Symbol : U1

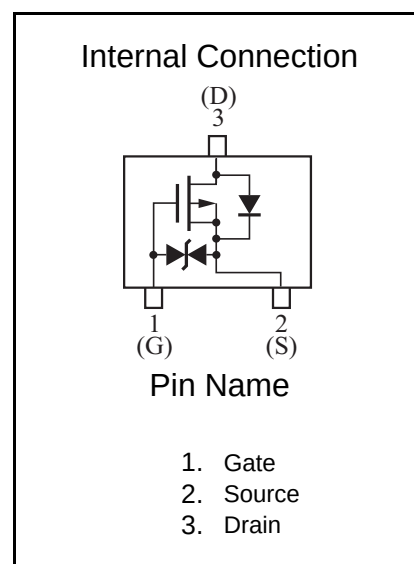
Embossed type (Thermo-compression sealing) :10 000 pcs / reel (standard)

■ Absolute Maximum Ratings $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Rating	Unit
Drain-source voltage	VDS	-30	V
Gate-source voltage	VGS	±12	V
Drain current	ID	-100	mA
Pulse drain current	IDp	-200	mA
Total power dissipation	PD	100	mW
Channel temperature	Tch	150	°C
Operating ambient temperature	Topr	-40 to +85	
Storage temperature	Tstg	-55 to +150	



Panasonic	SSSMini3-F2-B
JEITA	SC-105AA
Code	SOT-723

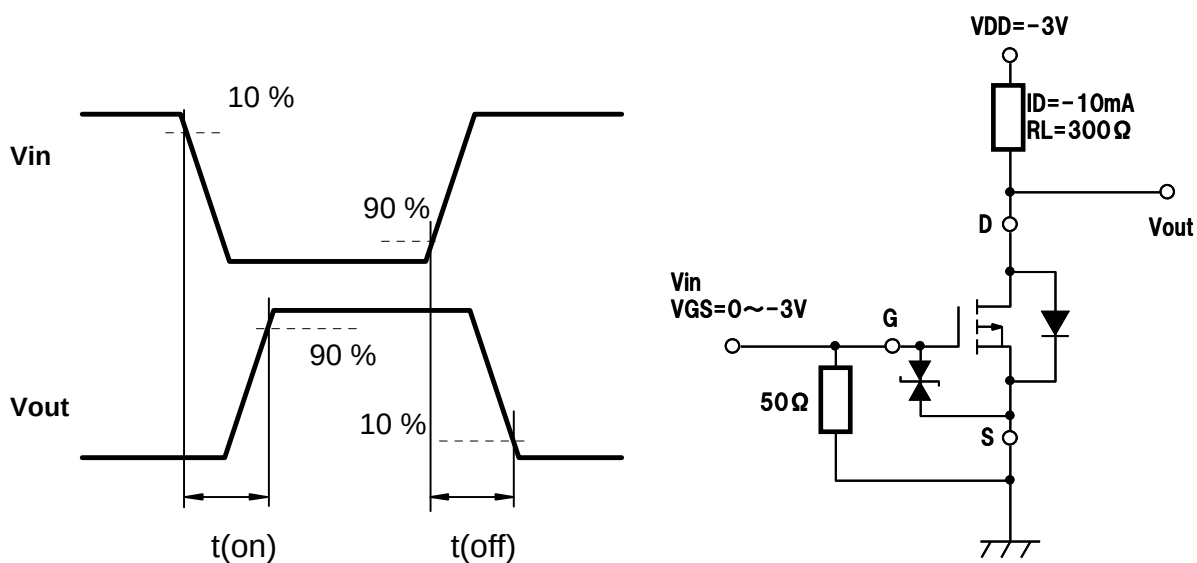


■ Electrical Characteristics Ta = 25 °C ± 3 °C

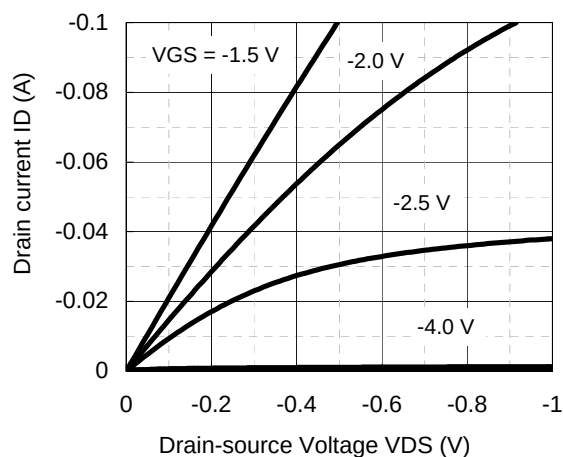
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Drain-source breakdown voltage	VDSS	ID = -1 mA, VGS = 0	-30			V
Drain-source cutoff current	IDSS	VDS = -30 V, VGS = 0			-1.0	μA
Gate-source cutoff current	IGSS	VGS = ±10 V, VDS = 0			±10	μA
Gate threshold voltage	VTH	ID = -1.0 μA, VDS = -3.0 V	-0.5	-1.0	-1.5	V
Drain-source ON resistance	RDS(on)1	ID = -10 mA, VGS = -2.5 V		7	17	Ω
	RDS(on)2	ID = -10 mA, VGS = -4.0 V		4	7	Ω
Forward transfer admittance	Yfs	ID = -10 mA, VDS = -3.0 V	20	40		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.

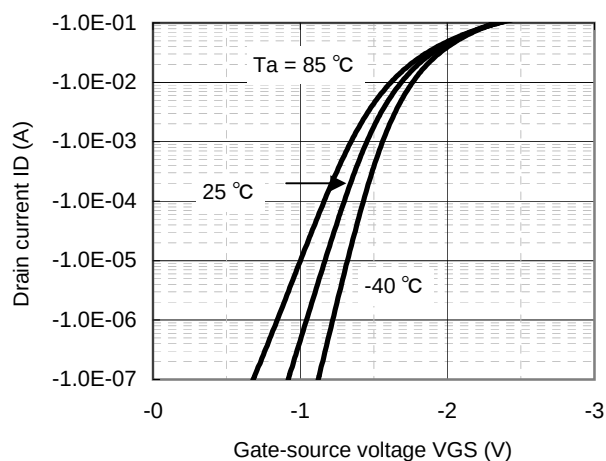
2. *1 Turn-on and Turn-off test circuit



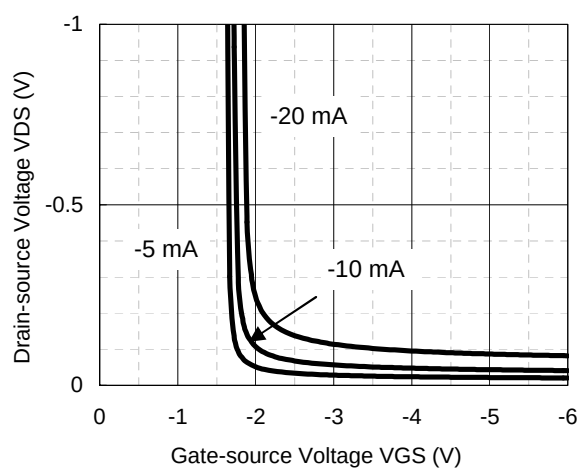
ID - VDS



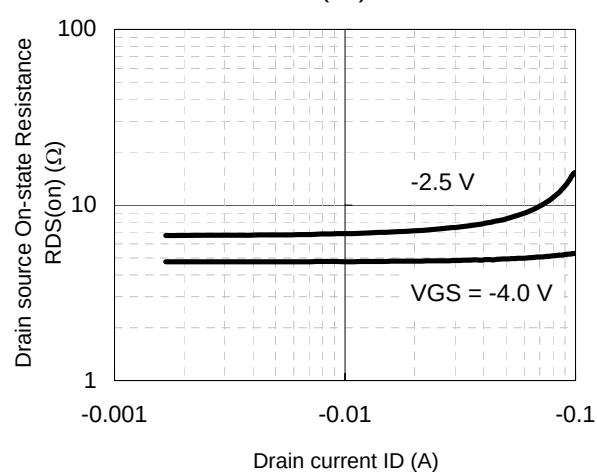
ID - VGS



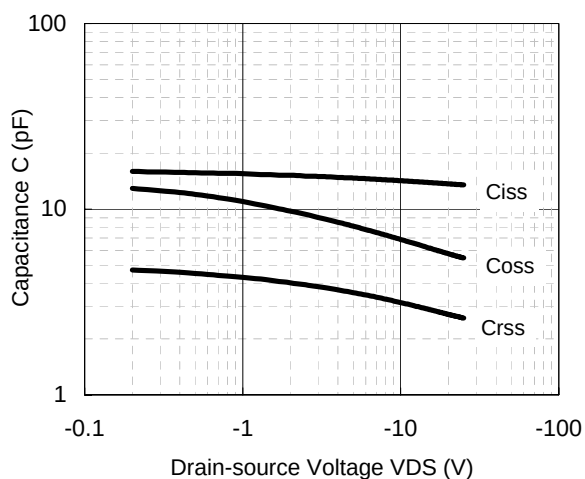
VDS - VGS



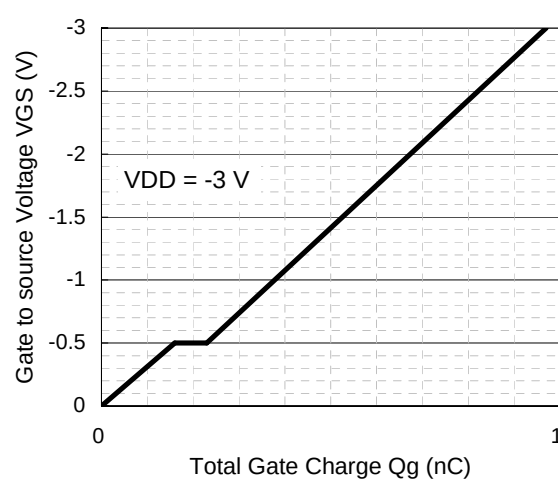
RDS(on) - ID



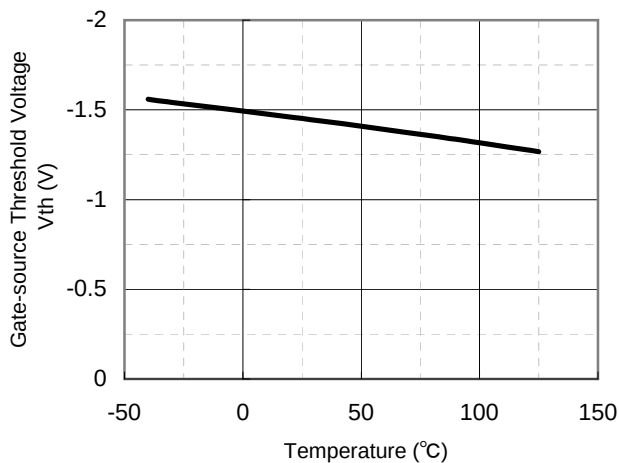
Capacitance - VDS



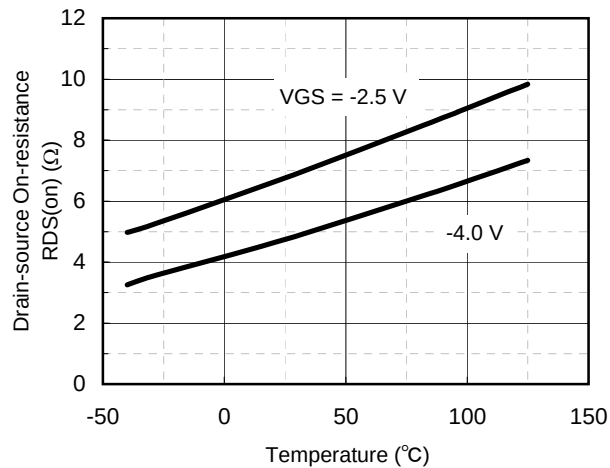
Dynamic Input/Output Characteristics



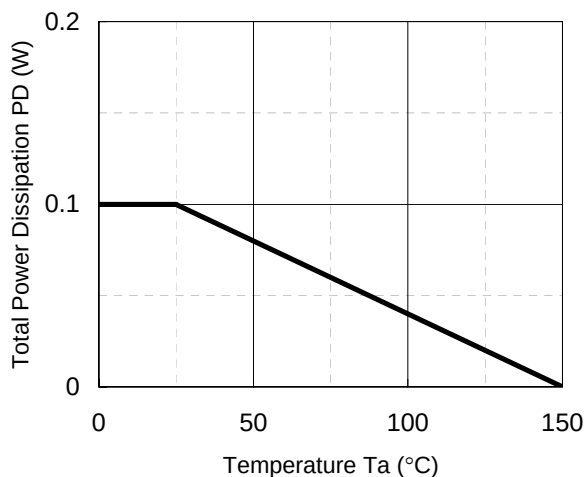
V_{th} - T_a



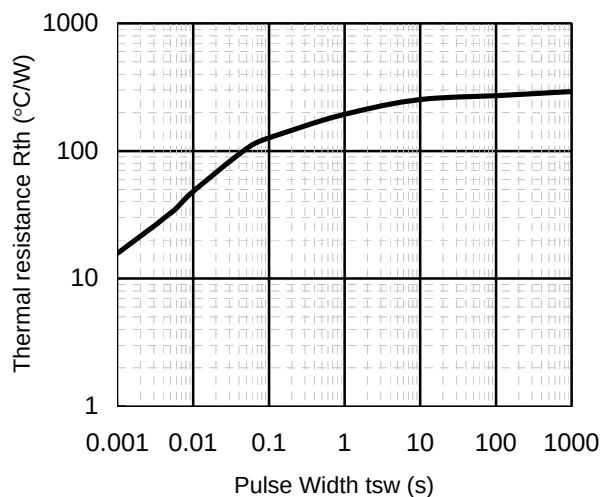
R_{DS(on)} - T_a



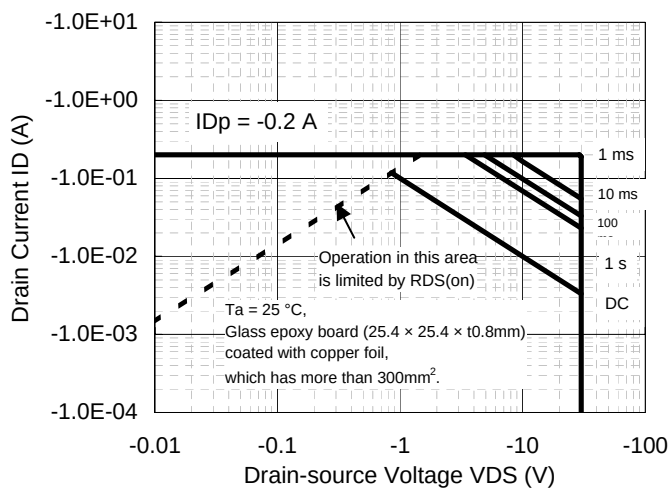
PD - T_a



R_{th} - t_{sw}

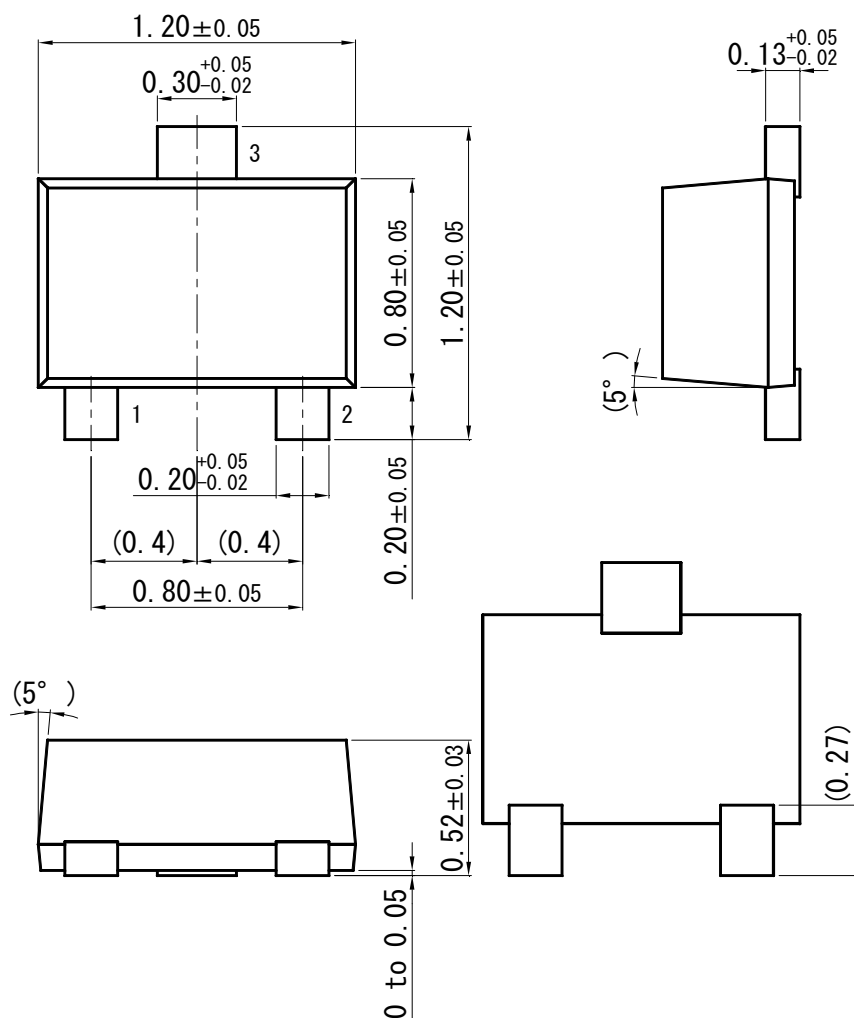


Safe Operating Area

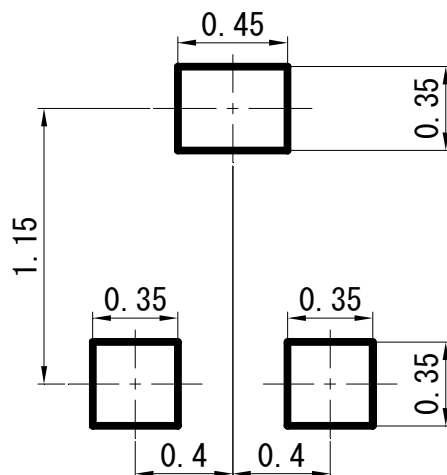


SSSMini3-F2-B

Unit : mm



■ Land Pattern (Reference) (Unit : mm)



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