# FJ3303010L

## Silicon P-channel MOSFET

For switching

FJ350301 in SSSMini3 type package

■ Features

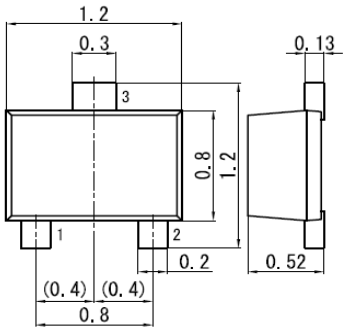
- Low drive voltage: 2.5 V drive
- Halogen-free / RoHS compliant
  (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

■ Marking Symbol: U1

■ Packaging

FJ3303010L Embossed type (Thermo-compression sealing):
10 000 pcs / reel (standard)

Unit: mm



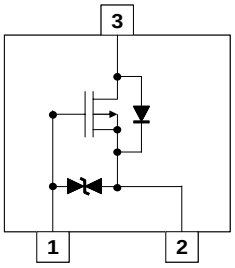

1. Gate
2. Source
3. Drain

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

■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Drain-source Voltage | VDS | -30 | V |
| Gate-source Voltage | VGS | ±12 | V |
| Drain Current | ID | -100 | mA |
| Drain Current (Pulsed) | IDp | -200 | mA |
| Total Power Dissipation | PD | 100 | mW |
| Channel Temperature | Tch | 150 | °C |
| Storage Temperature Range | Tstg | -55 to +150 | °C |

Internal Connection




Pin name

1. Gate
2. Source
3. Drain

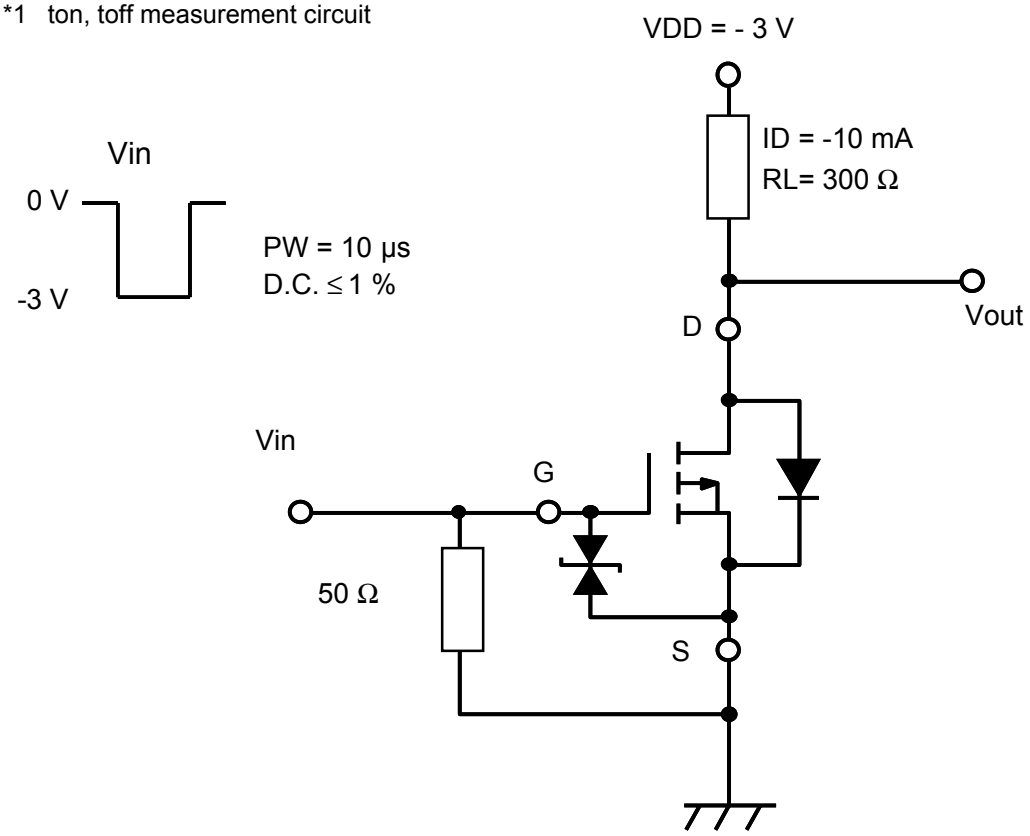
■ Electrical Characteristics Ta = 25 °C ± 3 °C

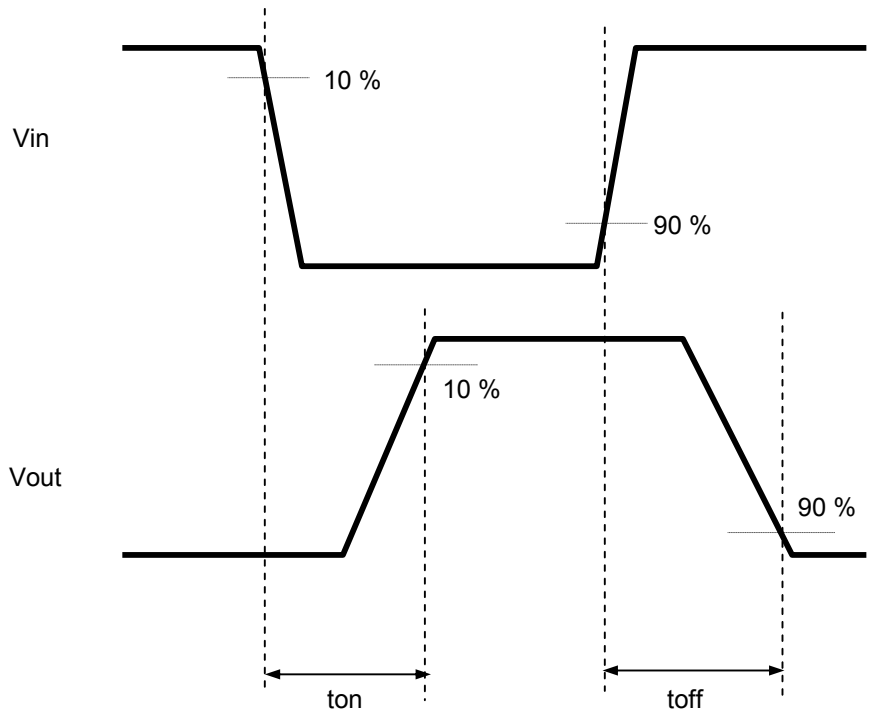
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Drain-source Breakdown Voltage | VDSS | ID = -1 mA, VGS = 0 V | -30 | | | V |
| Zero Gate Voltage Drain Current | IDSS | VDS = -30 V, VGS = 0 V | | | -1.0 | μA |
| Gate-source Leakage Current | IGSS | VGS = ±10 V, VDS = 0 V | | | ±10 | μA |
| Gate-source Threshold Voltage | Vth | ID = -1.0 μA, VDS = -3.0 V | -0.5 | -1.0 | -1.5 | V |
| Drain-source On-state 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 | |
| Forward Transfer Admittance | \|Yfs\| | ID = -10 mA, VDS = -3 V | 20 | 40 | | mS |
| Input Capacitance | Ciss | VDS = -3 V, VGS = 0, f = 1 MHz | | 12 | | pF |
| Output Capacitance | Coss | | | 7 | | |
| Reverse Transfer Capacitance | Crss | | | 3 | | |
| Turn-on Time *1 | ton | VDD = -3 V, VGS = 0 to -3 V<br>ID= -10mA | | 100 | | ns |
| Turn-off Time *1 | toff | VDD = -3 V, VGS = -3 to 0 V<br>ID= -10mA | | 100 | | ns |

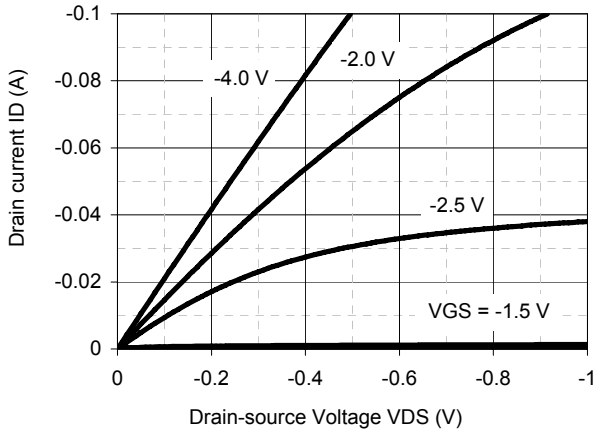
Note: Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.

*1 Turn on and turn off test circuit

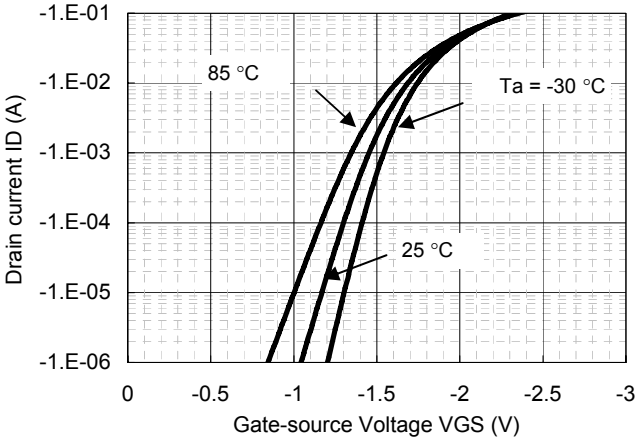
*1 ton, toff measurement circuit



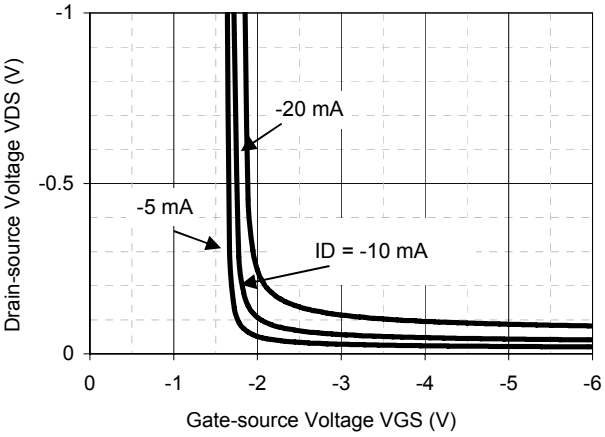





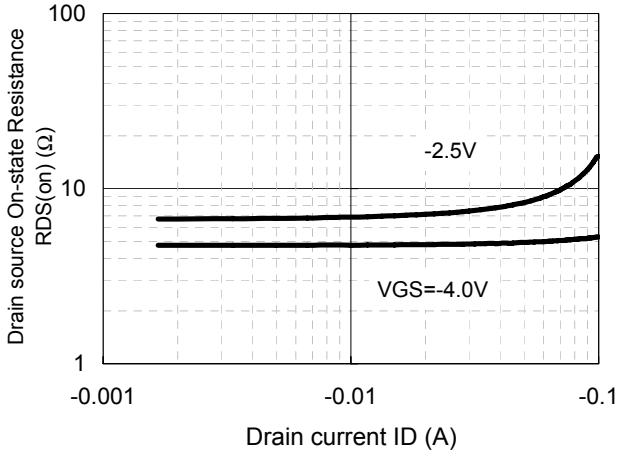

ID - VDS



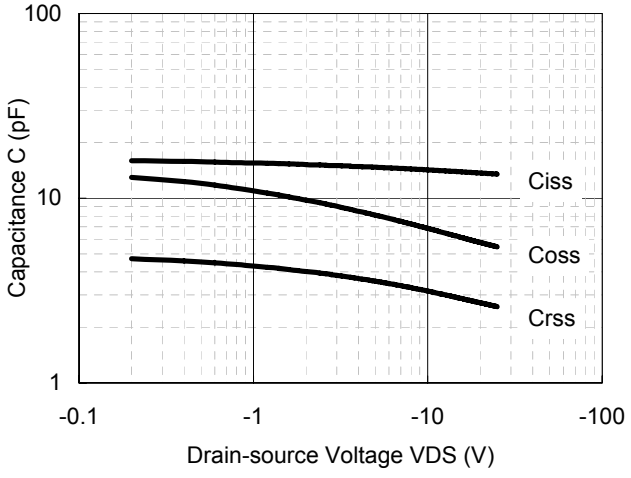

ID - VGS



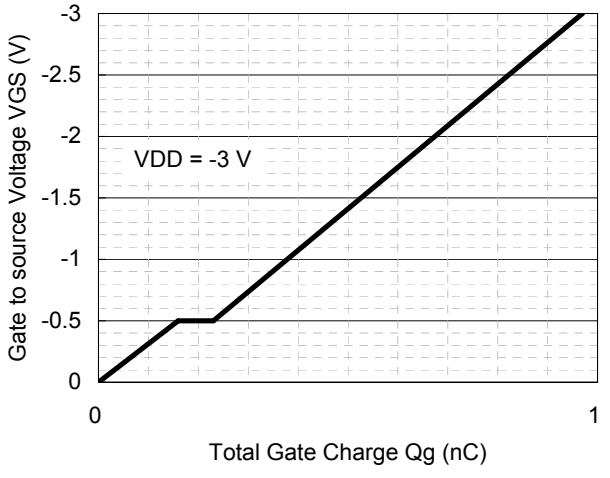

VDS - VGS



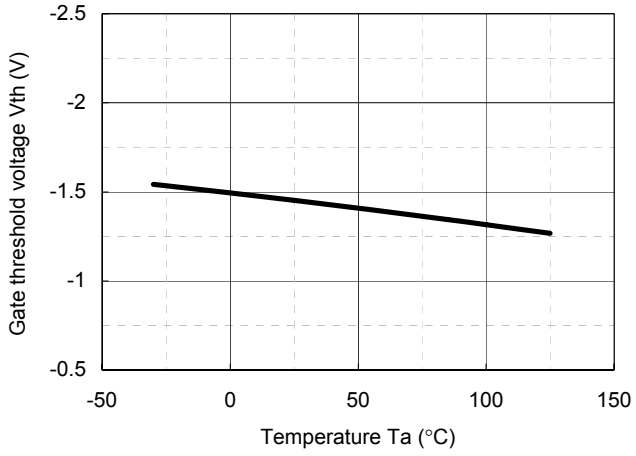

RDS(on) - ID



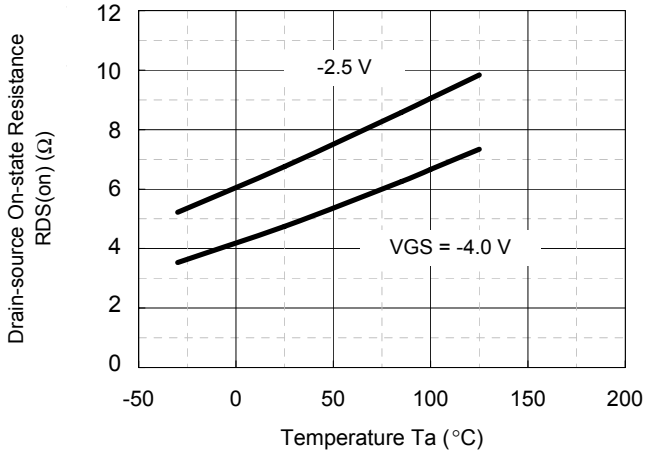

Capacitance - VDS



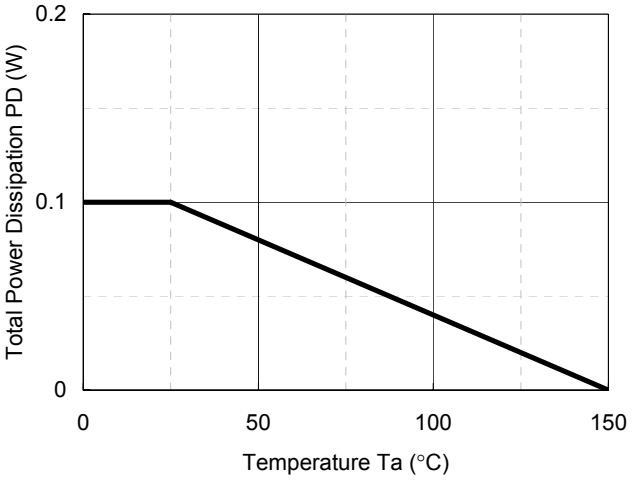

Dynamic Input/Output Characteristics



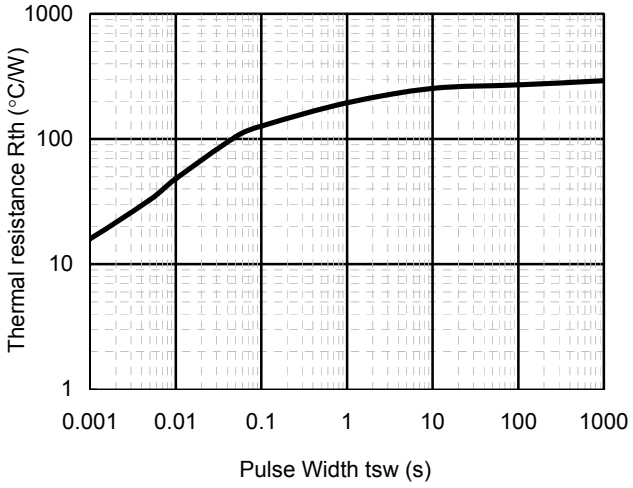

Vth - Ta



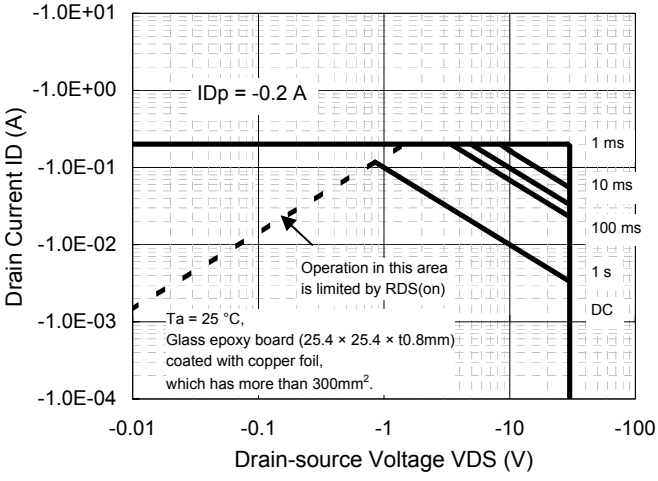

RDS(on) - Ta




PD - Ta



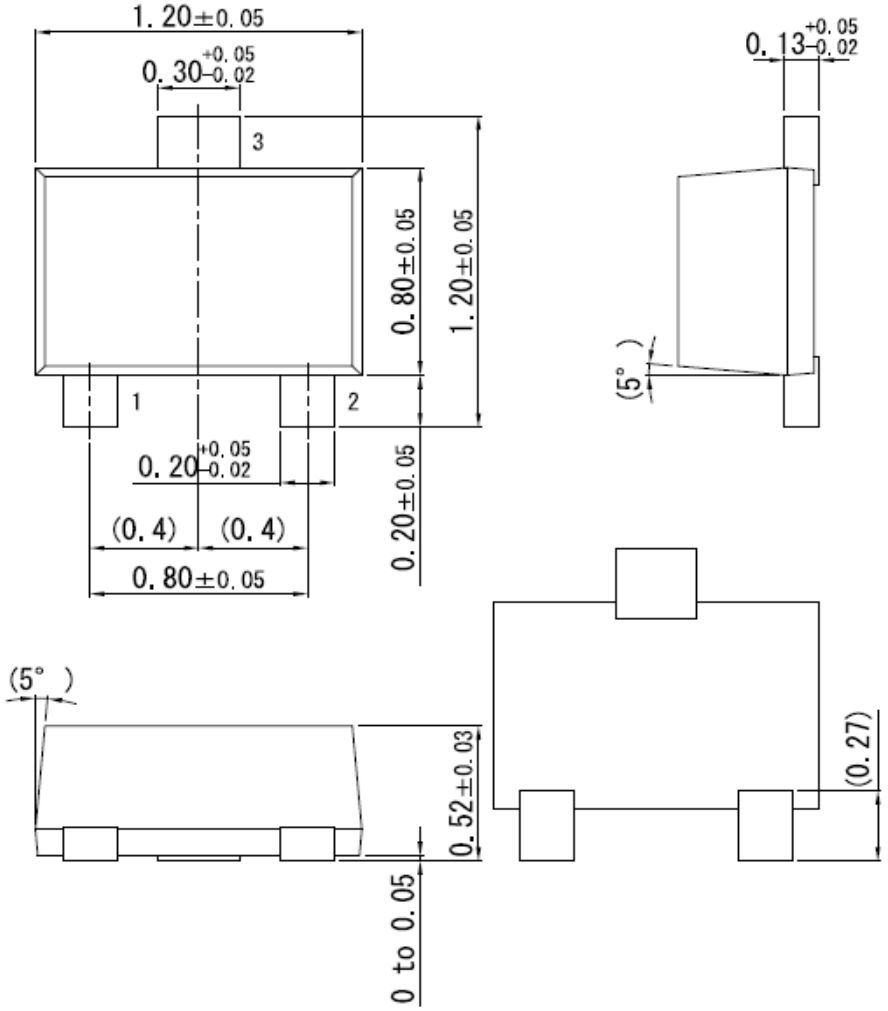

Rth -tsw



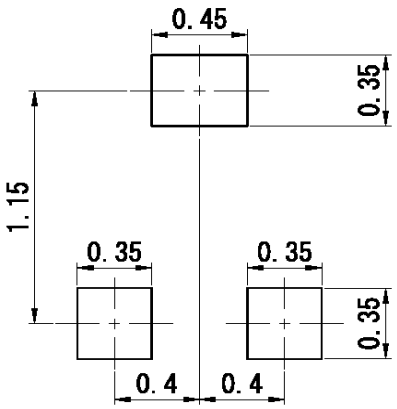

Safe Operating Area

# SSSMini3-F2-B

Unit: mm




■ Land Pattern (Reference) (Unit: mm)



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