



MTM761230LBF
 Silicon P-channel MOSFET

For Switching

■ Features

- Low drain-source On-state Resistance : RDS(on) typ. = 36 mΩ (VGS = -4 V)
- Low drive voltage : 2.5 V drive
- Halogen-free / RoHS compliant
 (EU RoHS / UL-94 V-0 / MSL : Level 1 compliant)

■ Marking Symbol : 9C

■ Packaging

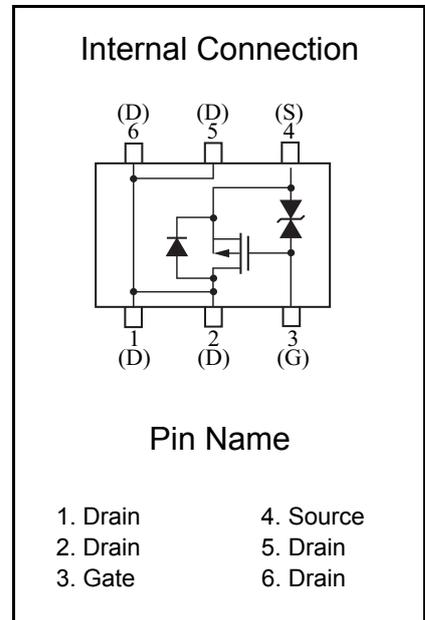
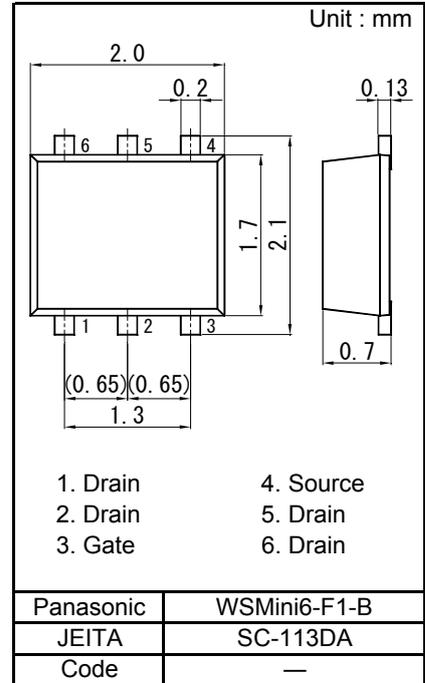
Embossed type (Thermo-compression sealing) : 3 000 pcs / reel (standard)

■ Absolute Maximum Ratings Ta = 25 °C

| Parameter | Symbol | Rating | Unit |
|-------------------------------|--------|-------------|------|
| Drain to Source Voltage | VDS | -20 | V |
| Gate to Source Voltage | VGS | ±10 | V |
| Drain Current | ID | -3 | A |
| Drain Current (Pulsed) *1 | IDp | -16 | A |
| Total Power Dissipation *2 | PD | 700 | mW |
| Channel Temperature | Tch | 150 | °C |
| Operating Ambient Temperature | Topr | -40 to +85 | °C |
| Storage Temperature Range | Tstg | -55 to +150 | °C |

Note) *1 Pulse width ≤ 10 μs, Duty cycle ≤ 1 %

*2 Measuring on ceramic board at 40 mm × 38 mm × 0.1 mm
 Absolute maximum rating PD Non-heat sink shall be made 150 mW.



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

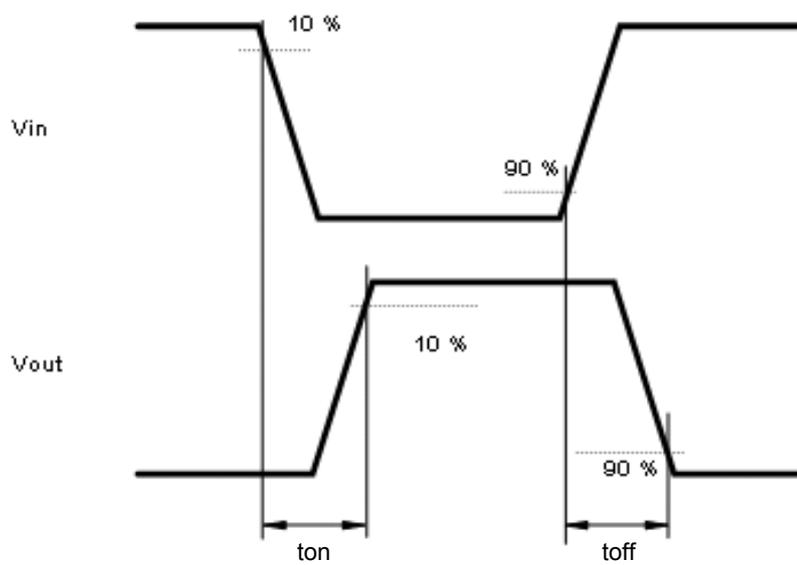
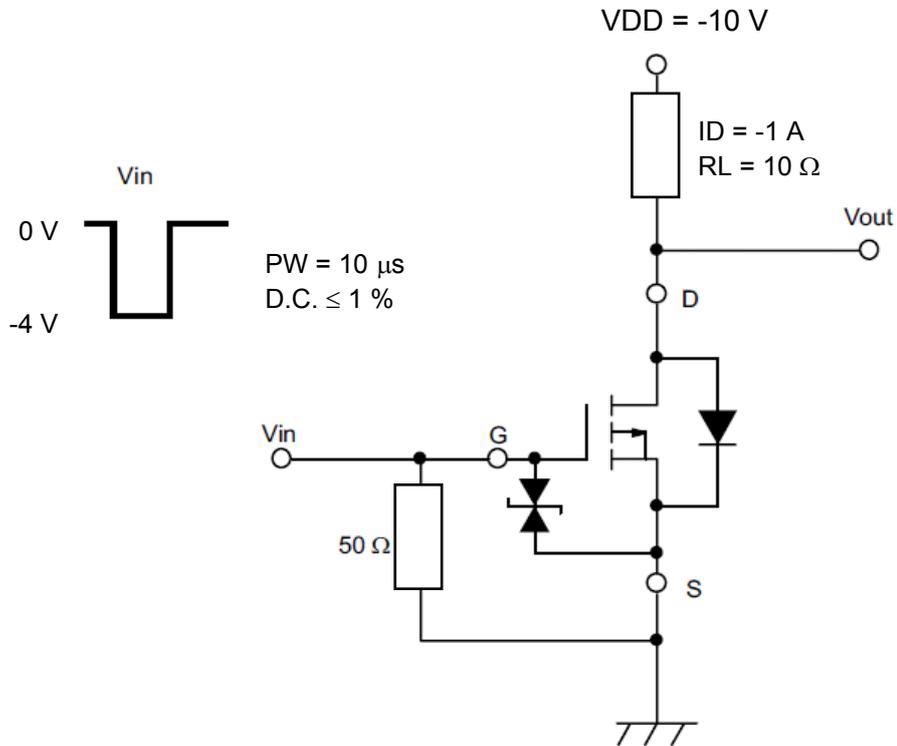
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|-------------------------------------|----------|---|------|-------|------|------|
| Drain-source Breakdown Voltage | VDSS | ID = -1 mA, VGS = 0 V | -20 | | | V |
| Zero Gate Voltage Drain Current | IDSS | VDS = -20 V, VGS = 0 V | | | -1 | μA |
| Gate-source Leakage Current | IGSS | VGS = ±8 V, VDS = 0 V | | | ±10 | μA |
| Gate-source Threshold Voltage | Vth | ID = -1 mA, VDS = -10 V | -0.4 | -0.85 | -1.3 | V |
| Drain-source On-state Resistance *1 | RDS(on)1 | ID = -1 A, VGS = -4 V | | 36 | 55 | mΩ |
| | RDS(on)2 | ID = -0.5 A, VGS = -2.5 V | | 42 | 70 | |
| Forward transfer admittance *1 | Yfs | ID = -1 A, VDS = -10 V, f = 1 kHz | 3.5 | | | S |
| Input Capacitance | Ciss | VDS = -10 V, VGS = 0 V f = 1 MHz | | 1 000 | | pF |
| Output Capacitance | Coss | | | 100 | | |
| Reverse Transfer Capacitance | Crss | | | 100 | | |
| Turn-on Delay Time *2 | ton | VDD = -10 V, VGS = 0 to -4 V ID = -1 A | | 30 | | ns |
| Turn-off Delay Time *2 | toff | VDD = -10 V, VGS = -4 to 0 V ID = -1 A | | 250 | | ns |

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

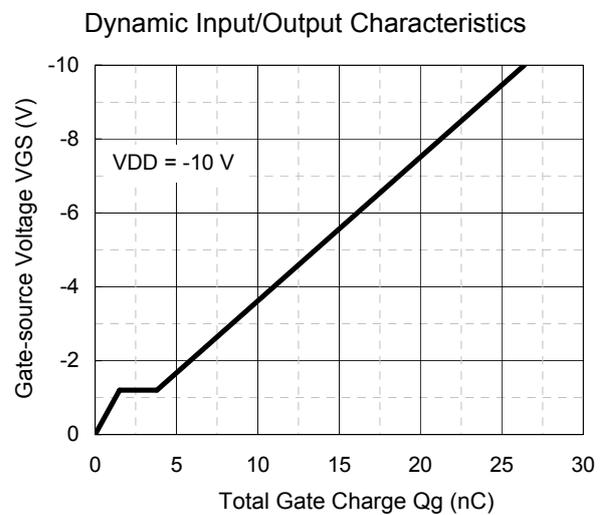
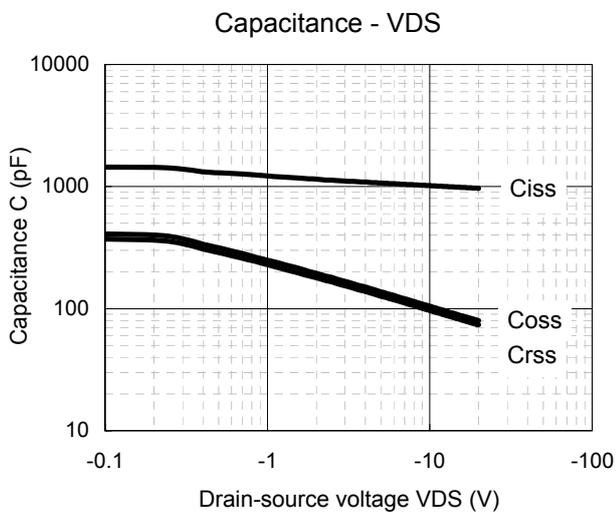
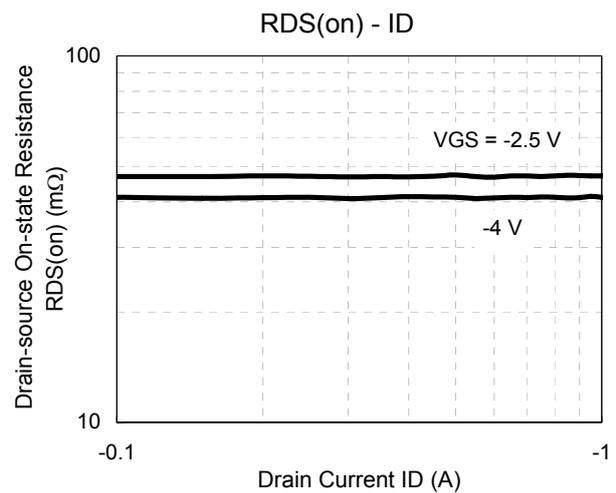
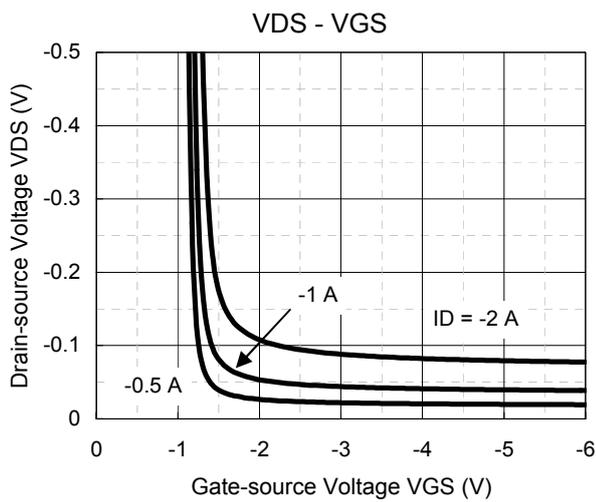
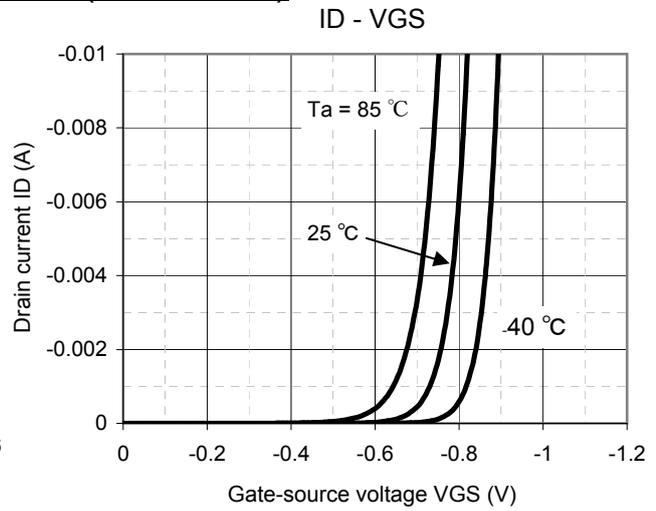
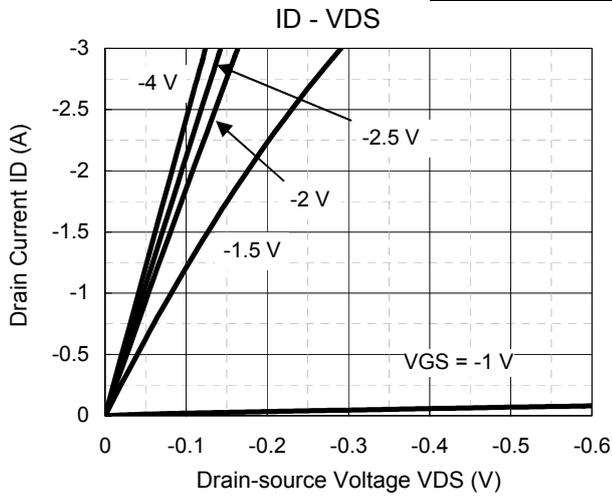
*1 Pulse test : Pulse width ≤ 300 μs, Duty cycle ≤ 2 %

*2 Measurement circuit for Turn-on Delay Time / Turn-off Delay Time

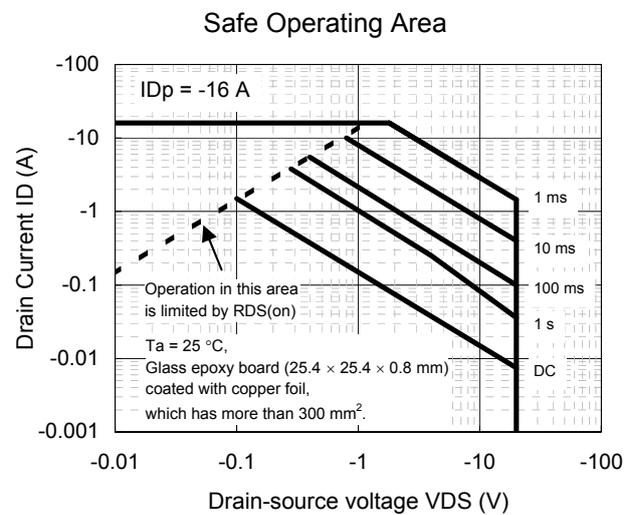
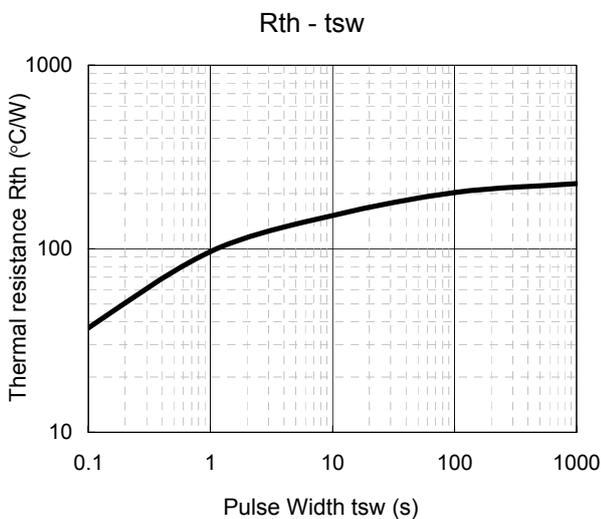
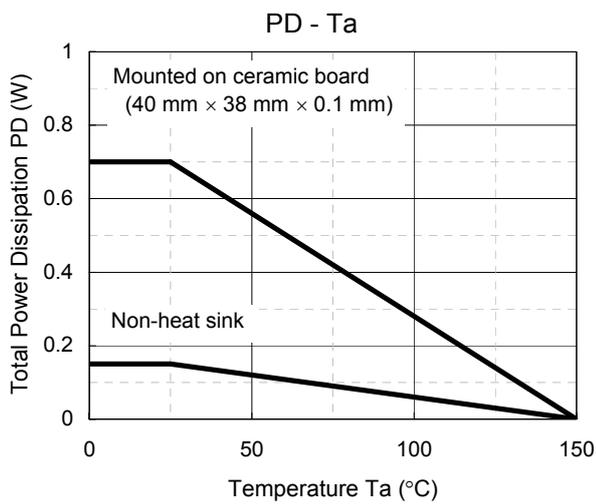
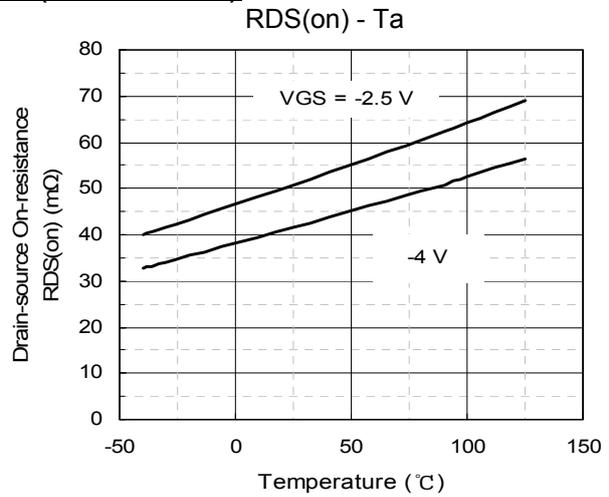
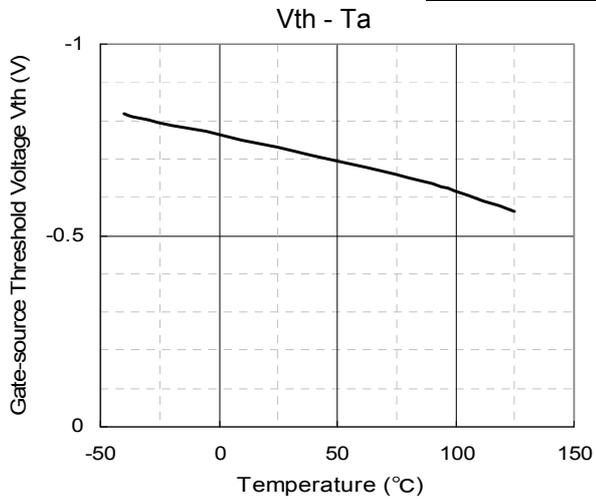
*2 Measurement circuit for Turn-on Delay Time / Turn-off Delay Time



Technical Data (reference)

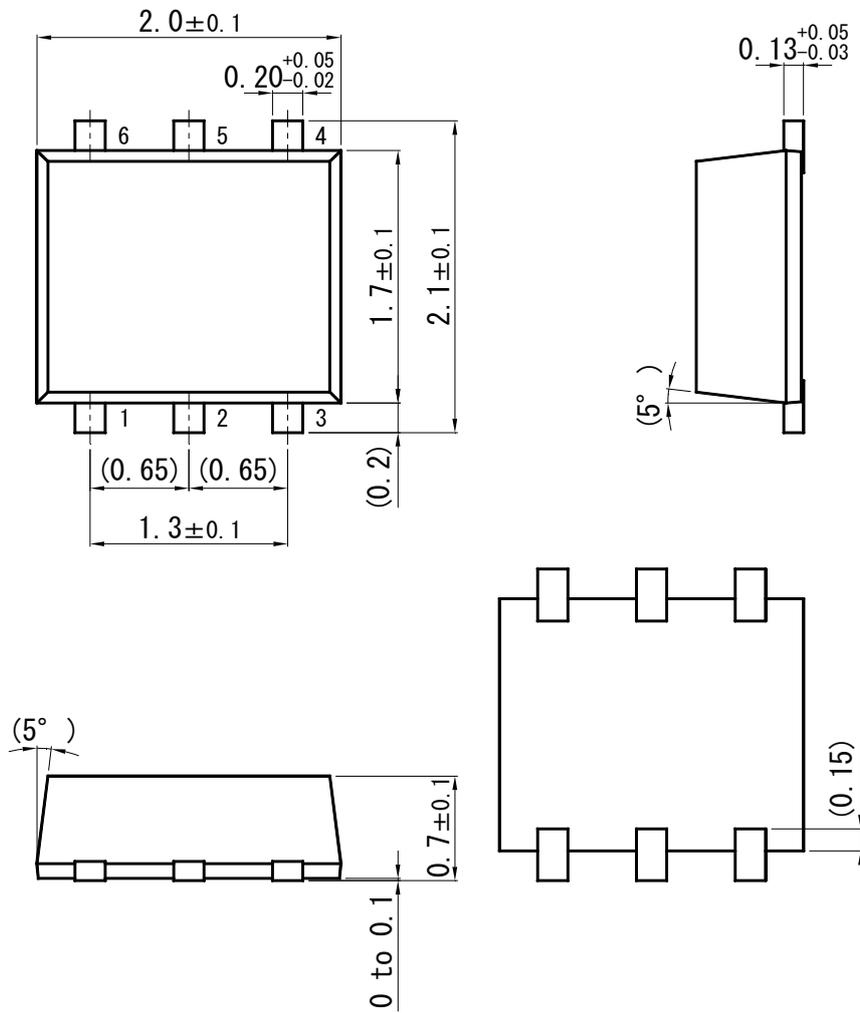


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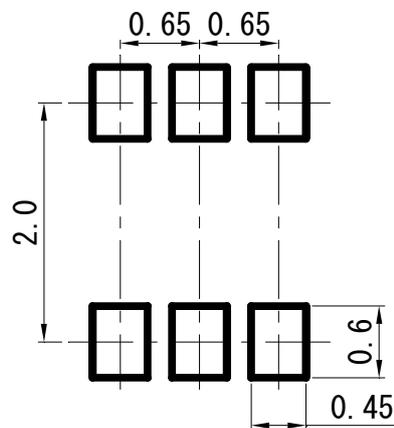


WSMini6-F1-B

Unit : mm



■ Land Pattern (Reference) (Unit : mm)



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