



MTM761100LBF
 Silicon P-channel MOSFET

For Switching

■ Features

- Low Drain-source On-state Resistance : $R_{DS(on)}$ typ. = 30 m Ω (VGS = -4.0 V)
- Low Drive Voltage : 1.8 V Drive
- Halogen-free / RoHS compliant
 (EU RoHS / UL-94 V-0 / MSL : Level 1 compliant)

■ Marking Symbol : 9D

■ Packaging

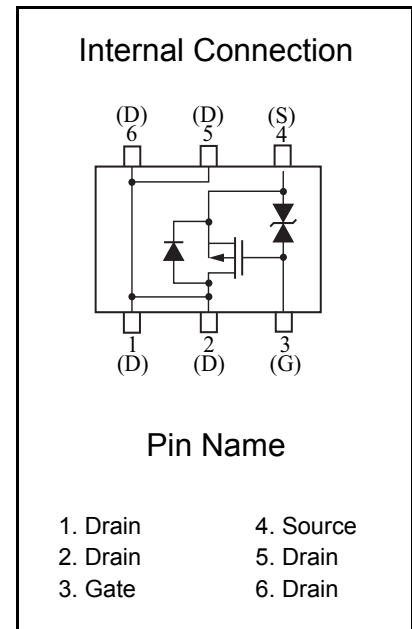
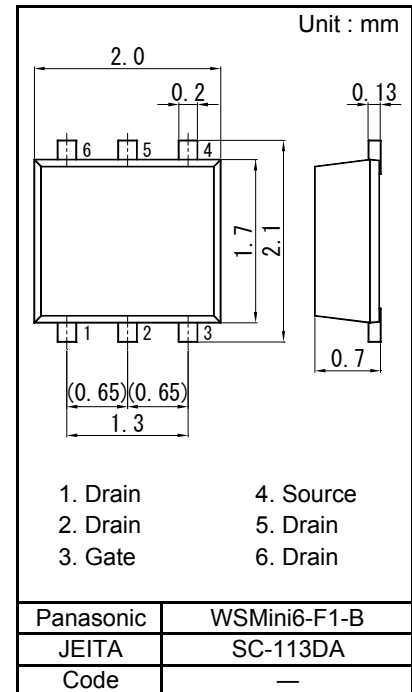
Embossed type (Thermo-compression sealing) 3 000 pcs / reel (standard)

■ Absolute Maximum Ratings Ta = 25 °C

| Parameter | Symbol | Rating | Unit |
|---------------------------------------|--------|-------------|------|
| Drain to Source Voltage | VDS | -12 | V |
| Gate to Source Voltage | VGS | ±8 | V |
| Drain Current | ID | -4.0 | 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 | |
| Storage Temperature Range | Tstg | -55 to +150 | |

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

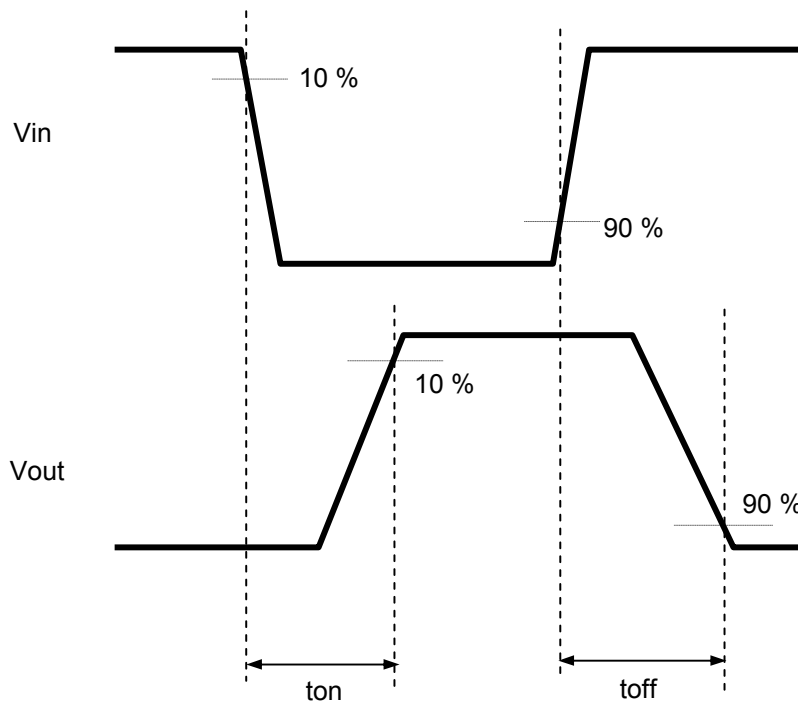
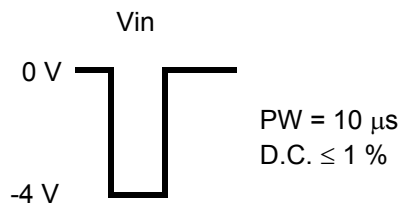
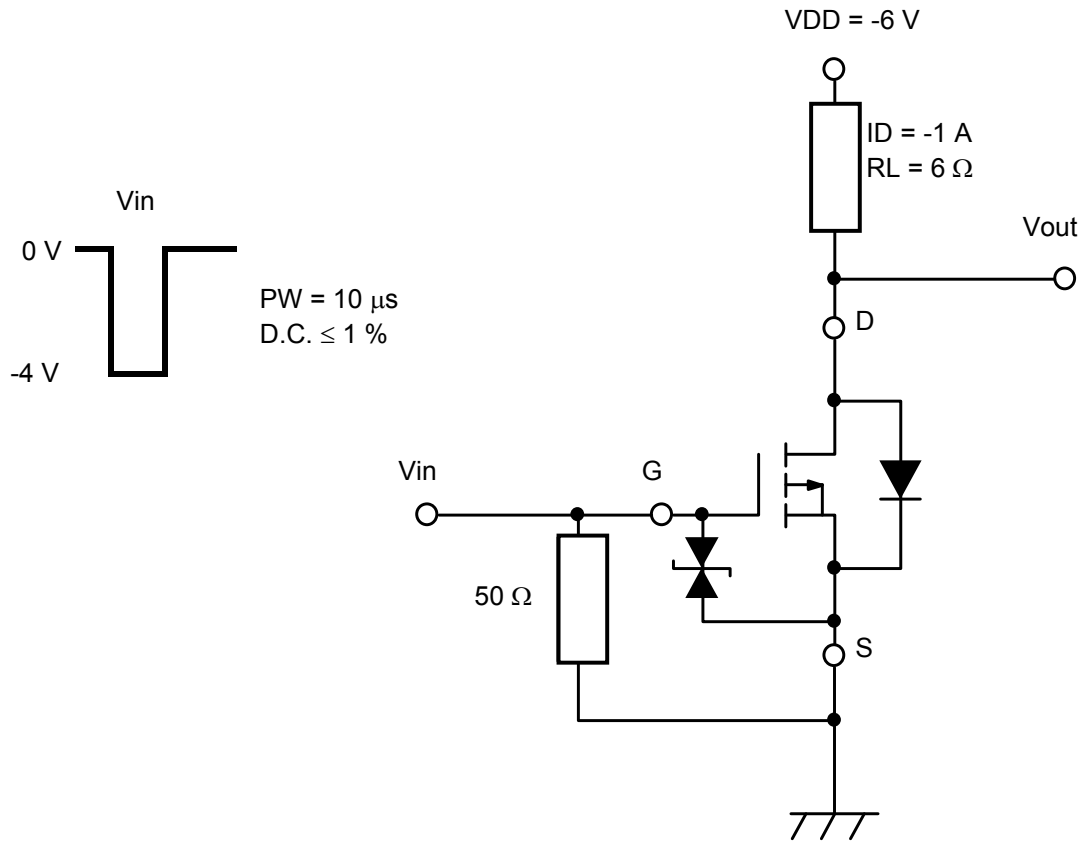
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|-------------------------------------|----------|--|------|-------|------|------|
| Drain-source Breakdown Voltage | VDSS | ID = -1 mA, VGS = 0 V | -12 | | | V |
| Zero Gate Voltage Drain Current | IDSS | VDS = -12 V, VGS = 0 V | | | -1.0 | μA |
| Gate-source Leakage Current | IGSS | VGS = ±6.4 V, VDS = 0 V | | | ±10 | μA |
| Gate-source Threshold Voltage | Vth | ID = -1.0 mA, VDS = -6.0 V | -0.3 | -0.65 | -1.0 | V |
| Drain-source On-state Resistance *1 | RDS(ON)1 | ID = -1 A, VGS = -4.0 V | | 30 | 42 | mΩ |
| | RDS(ON)2 | ID = -0.5 A, VGS = -2.5 V | | 35 | 55 | |
| | RDS(ON)3 | ID = -0.2 A, VGS = -1.8 V | | 45 | 75 | |
| 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 | | 1200 | | pF |
| Output Capacitance | Coss | | | 110 | | |
| Reverse Transfer Capacitance | Crss | | | 110 | | |
| Turn-on Time *2 | ton | VDD = -6 V, VGS = 0 to -4 V ID = -1 A | | 30 | | ns |
| Turn-off Time *2 | toff | VDD = -6 V, VGS = -4 to 0 V ID = -1 A | | 300 | | ns |

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

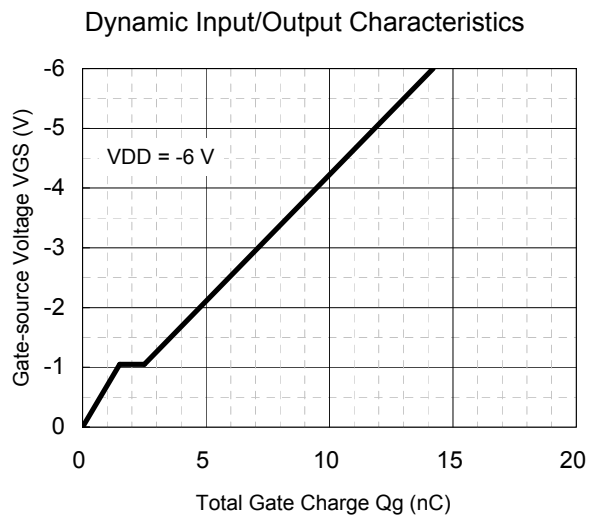
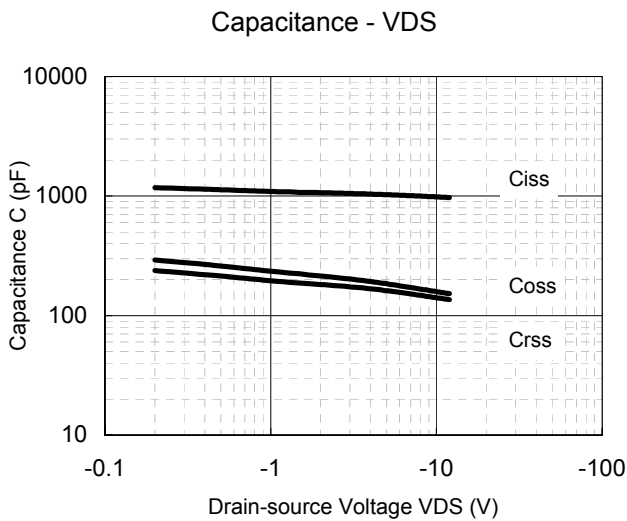
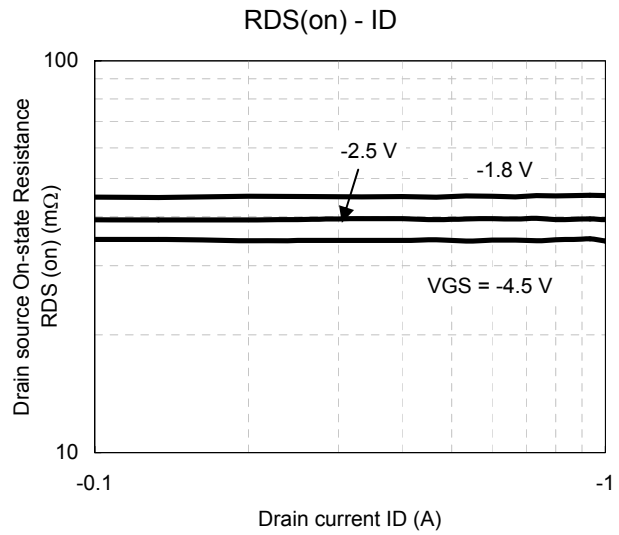
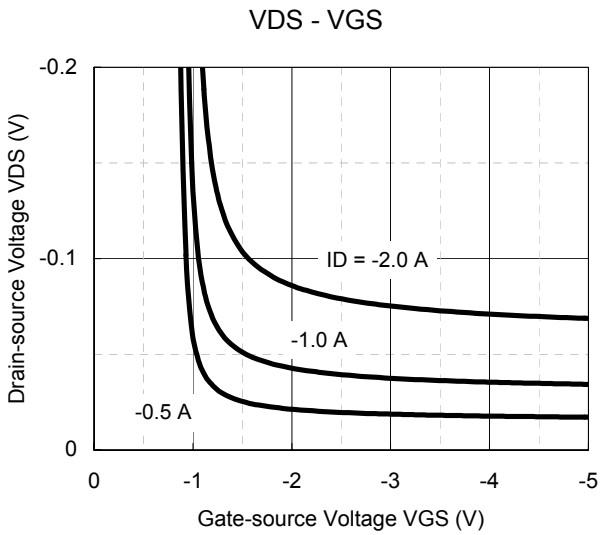
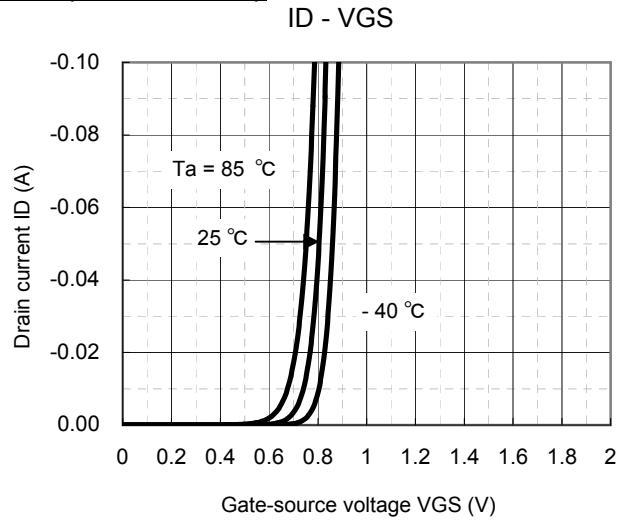
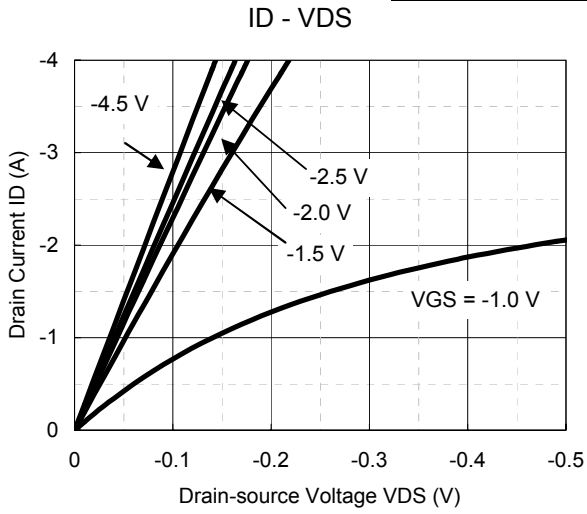
*1 Pulse test : Pulse width ≤ 300 μs, Duty cycle ≤ 2 %

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

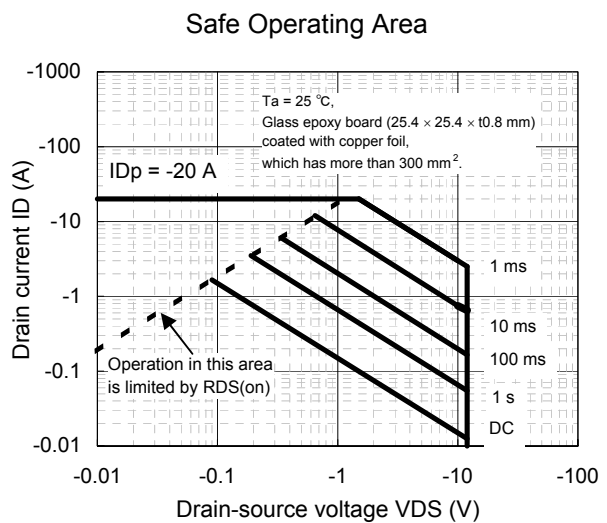
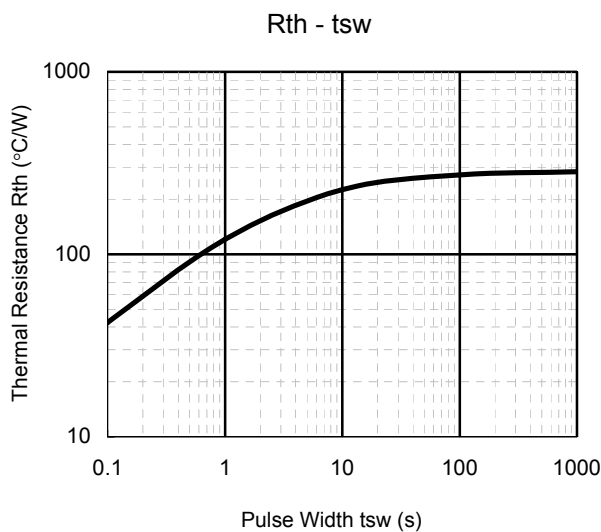
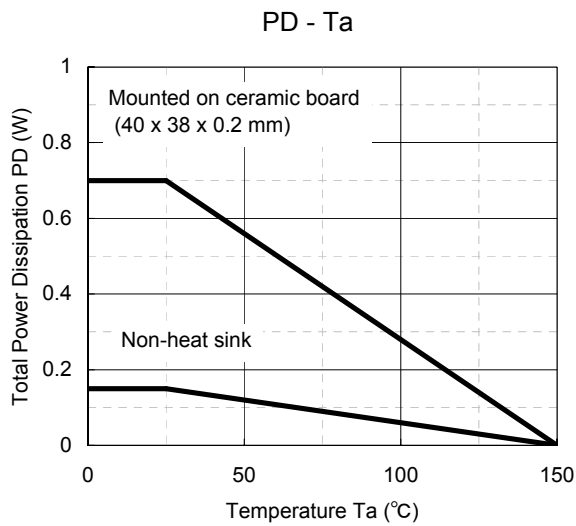
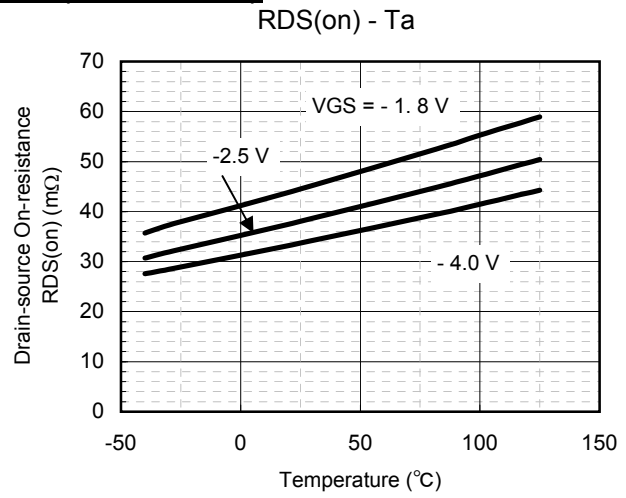
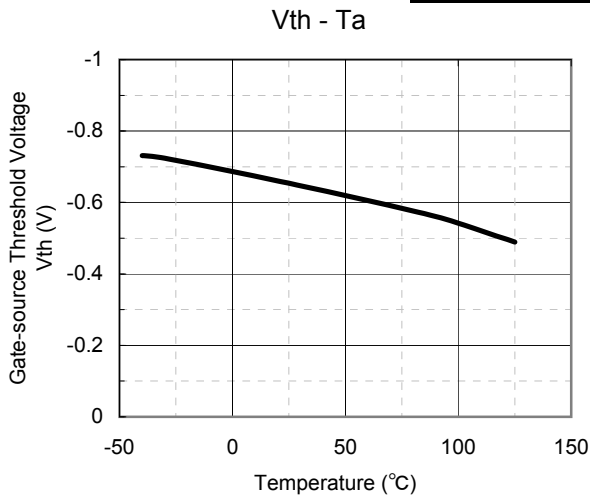
*2 Measurement circuit for Turn-on Time / Turn-off Time



Technical Data (reference)

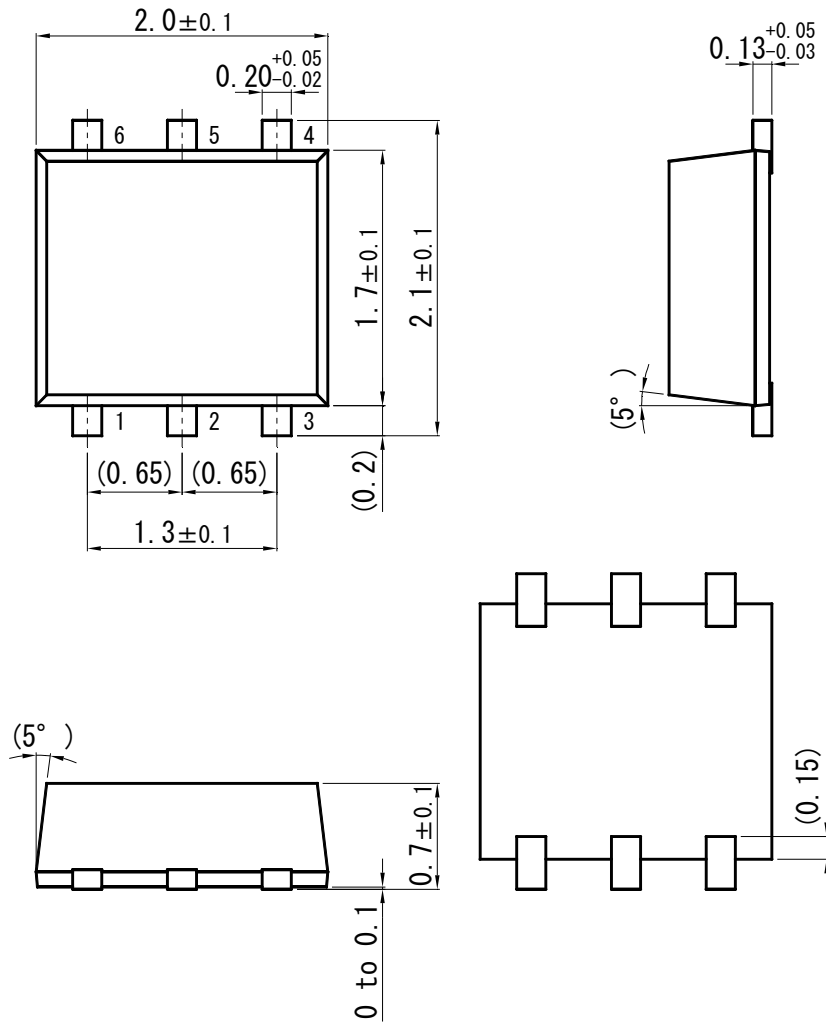


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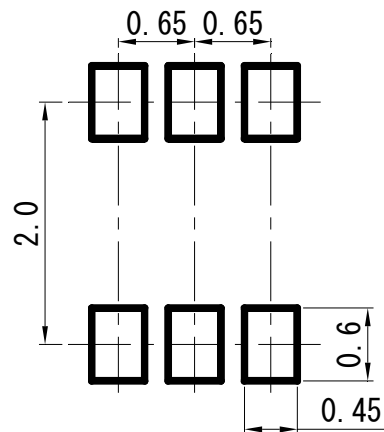


WSMini6-F1-B

Unit : mm



■ Land Pattern (Reference) (Unit : mm)



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