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MTM761110LBF

# MOS FET MTM761110LBF

## Silicon P-channel MOSFET

### For Switching

#### Features

- Low Drain-source On-state Resistance : RDS(on) typ. = 26 m $\Omega$  (VGS = -4.5 V)
- Low Drive Voltage : 1.8 V Drive
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL : Level 1 compliant)
- Marking Symbol : GS

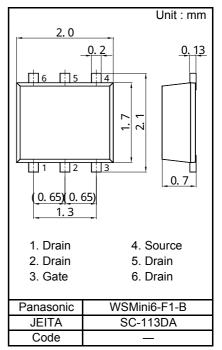
#### Packaging

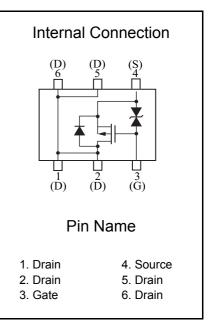
Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

| Absolute Maximum Ratings Ta = 2       | 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        | А    |  |
| Drain Current (Pulsed)                | IDp    | -20         | А    |  |
| Total Power Dissipation <sup>*1</sup> | PD     | 700         | mW   |  |
| Channel Temperature                   | Tch    | 150         | °C   |  |
| Operating ambient temperature         | Topr   | -40 to +85  | °C   |  |
| Storage Temperature Range             | Tstg   | -55 to +150 | С°   |  |

Note : \*1 Measuring on ceramic board at 40 mm  $\times$  38 mm  $\times$  0.2 mm.

Absolute maximum rating PD Non-heat sink shall be made 150 mW.





## **Panasonic**

## MOS FET MTM761110LBF

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

| Parameter  | Symbol   | Conditions                                 | Min  | Тур   | Max  | Unit |
|--|----------|--|------|-------|------|------|
| Drain-source surrender voltage                   | VDSS     | ID = -1 mA, VGS = 0                        | -12  |       |      | V    |
| Drain-source cutoff current                      | IDSS     | VDS = -10 V, VGS = 0                       |      |       | -0.1 | μA   |
| Gate-source cutoff current                       | IGSS     | VGS = ±8 V, VDS = 0                        |      |       | ±10  | μA   |
| Gate threshold voltage                           | Vth      | ID = -1.0 mA, VDS = -6.0 V                 | -0.3 | -0.65 | -1.0 | V    |
| Drain-source ON resistance                       | RDS(ON)1 | ID = -1.0 A, VGS = -4.5 V                  |      | 26    | 34   | mΩ   |
|  | RDS(ON)2 | ID = -0.5 A, VGS = -2.5 V                  |      | 30    | 41   |      |
|  | RDS(ON)3 | ID = -0.5 A, VGS = -1.8 V                  |      | 36    | 54   |      |
| Forward transfer admittance                      | Yfs      | ID = -1.0 A, VDS = -10 V                   | 4.0  |       |      | S    |
| Short-circuit input capacitance (Common source)  | Ciss     |  |      | 1400  |      | pF   |
| Short-circuit output capacitance (Common source) | Coss     | VDS = -10 V, VGS = 0, f = 1 MHz            |      | 135   |      |      |
| Reverse transfer capacitance (Common source)     | Crss     |  |      | 150   |      |      |
| Turn-on delay time <sup>*1</sup>                 | td(on)   | VDD = -6 V, VGS = 0 to -4 V<br>ID = -1.0 A |      | 9     |      | ns   |
| Rise time <sup>*1</sup>                          | tr       |  |      | 11    |      |      |
| Turn-off delay time <sup>*1</sup>                | td(off)  |  |      | 270   |      | ns   |
| Fall time <sup>*1</sup>                          | tf       |  |      | 160   |      |      |

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

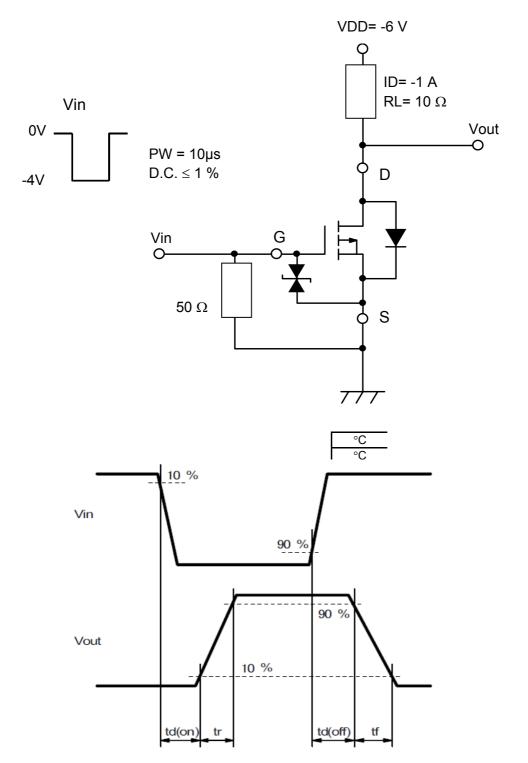
\*1 Measurement circuit for Turn-on Delay Time / Turn-off Delay Time

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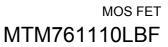


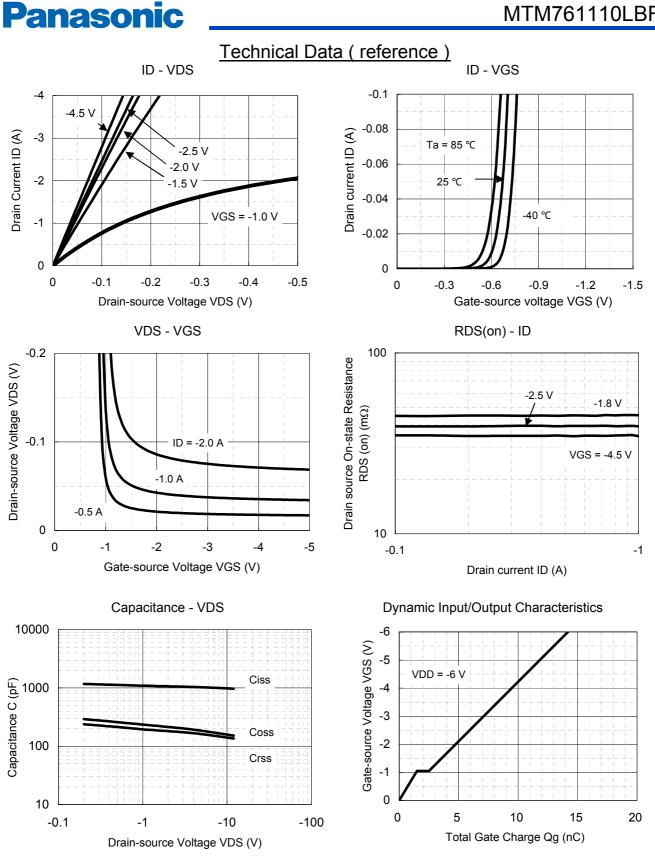
MOS FET MTM761110LBF

\*1 Measurement circuit for Turn-on Delay Time / Turn-off Delay Time

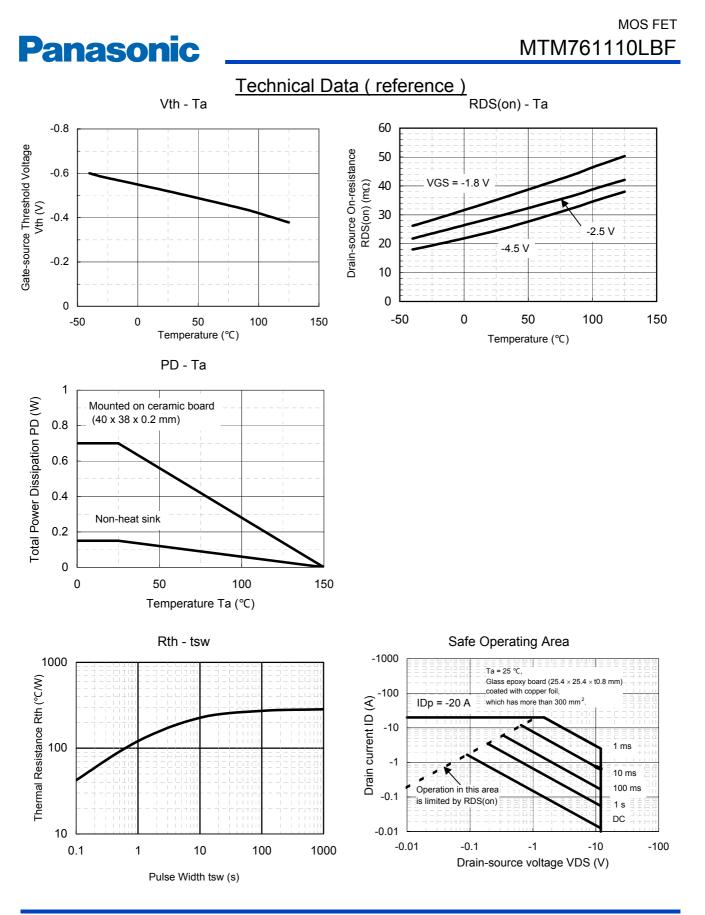


Established : 2008-02-01 Revised : 2013-10-18





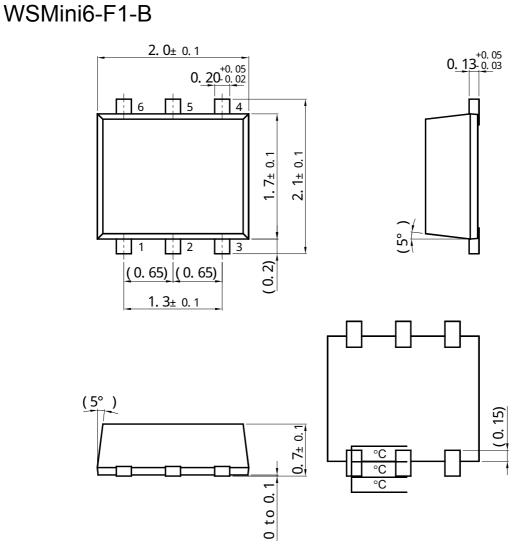
Established : 2008-02-01 Revised : 2013-10-18



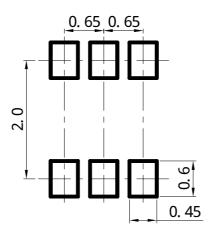


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Unit : mm



■ Land Pattern (Reference) (Unit : mm)



Established : 2008-02-01 Revised : 2013-10-18

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