MOS FET

Panasonic

MTM761100LBF

MTM761100LBF

Silicon P-channel MOSFET

For Switching

■ Features

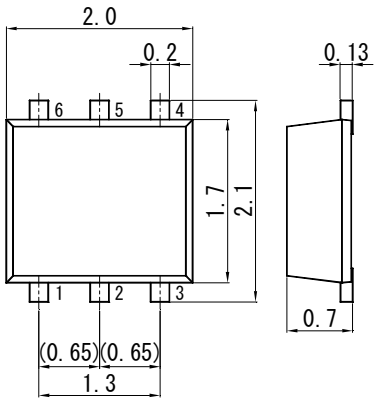
- Low Drain-source On-state Resistance : RDS(on) typ. = 30 mΩ (VGS = -4.0 V)
- Low Drive Voltage : 1.8 V Drive
- Halogen-free / RoHS compliant
  (EU RoHS / UL-94 V-0 / MSL : Level 1 compliant)

■ Marking Symbol : 9D

■ Packaging

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

Unit : mm



1. Drain
2. Drain
3. Gate
4. Source
5. Drain
6. Drain

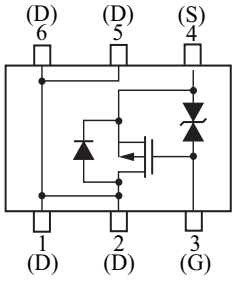
Panasonic	WSMini6-F1-B
JEITA	SC-113DA
Code	—

■ 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.

Internal Connection



Pin Name

1. Drain
2. Drain
3. Gate
4. Source
5. Drain
6. Drain

Established : 2008-01-31
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■ 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

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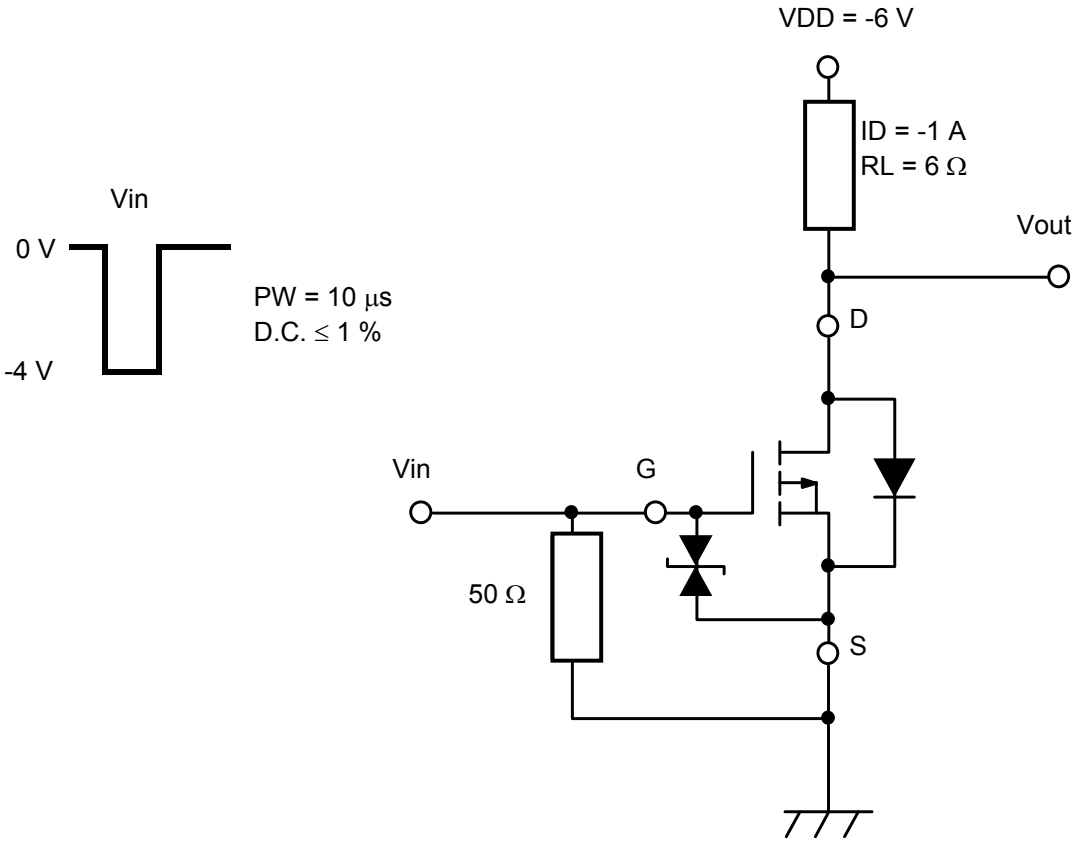
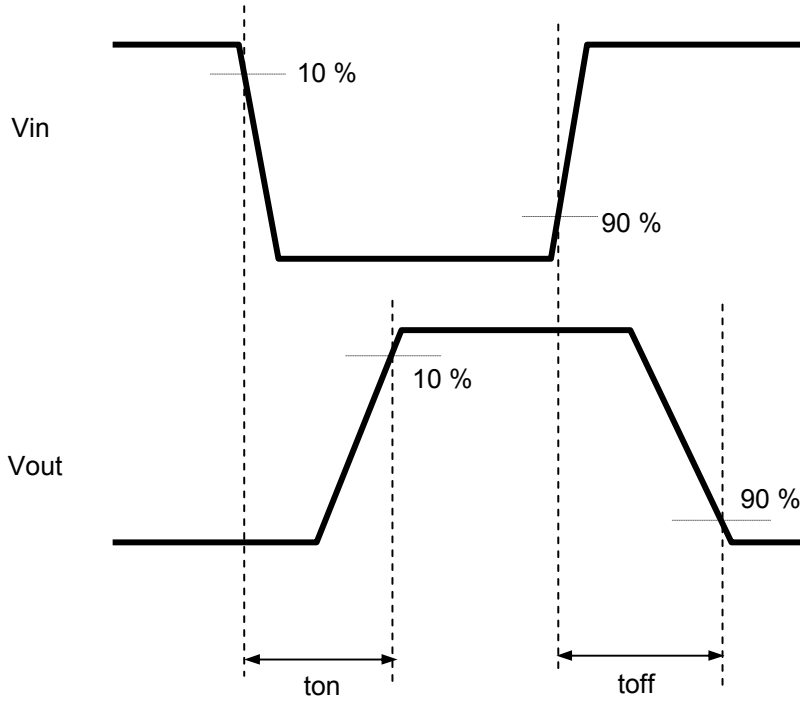
*2 Measurement circuit for Turn-on Time / Turn-off Time





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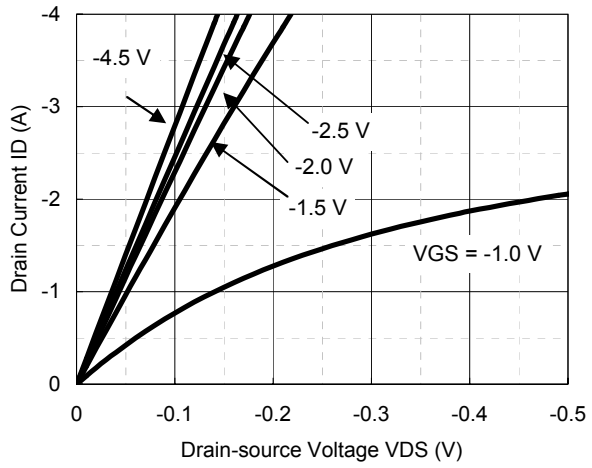
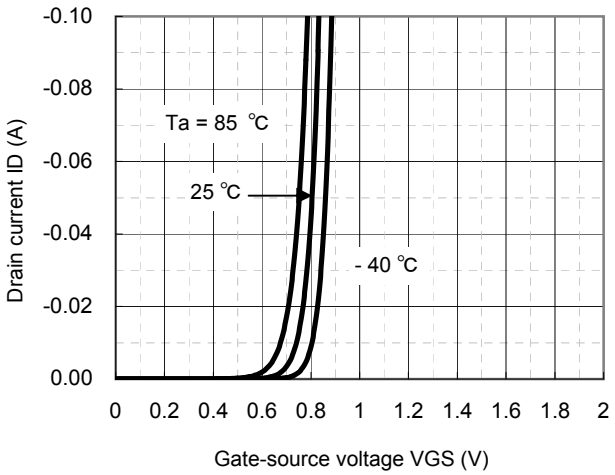
Technical Data (reference)

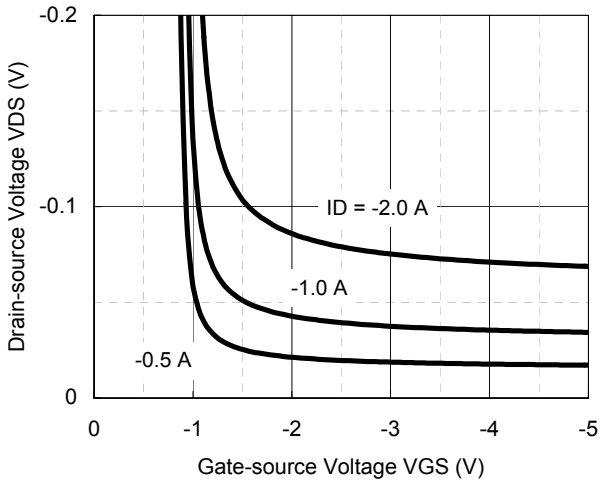
ID - VDS



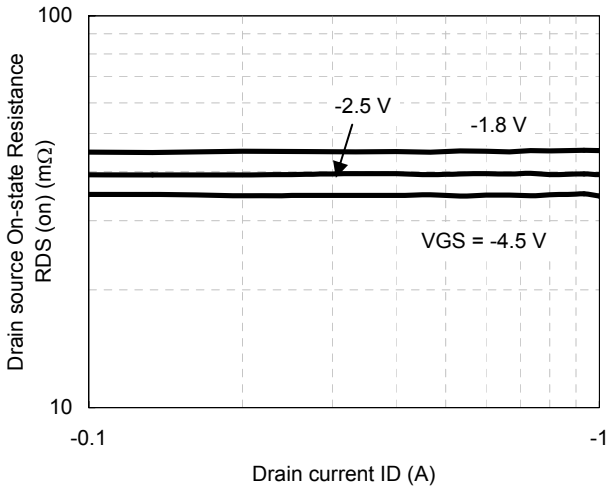
ID - VGS



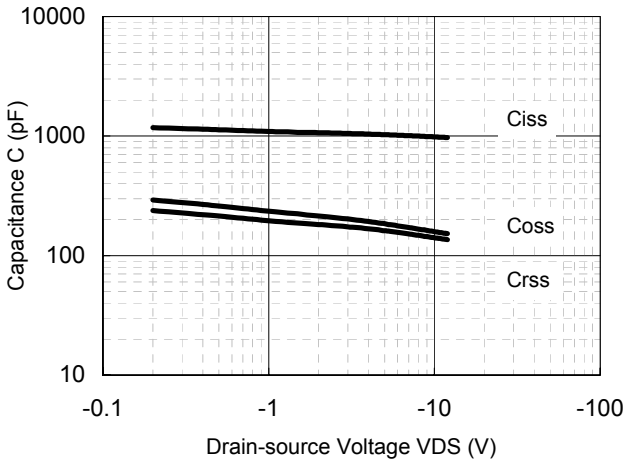
VDS - VGS



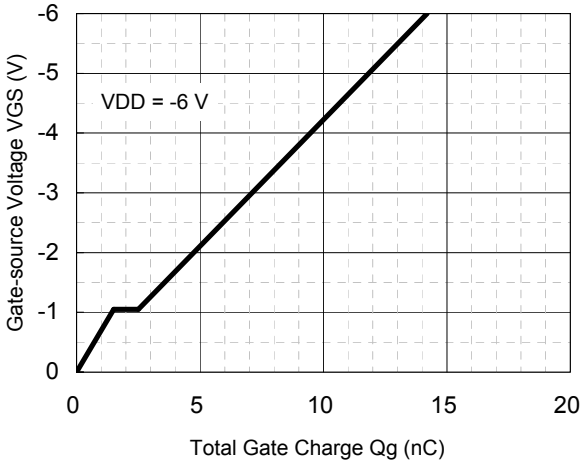
RDS(on) - ID



Capacitance - VDS



Dynamic Input/Output Characteristics



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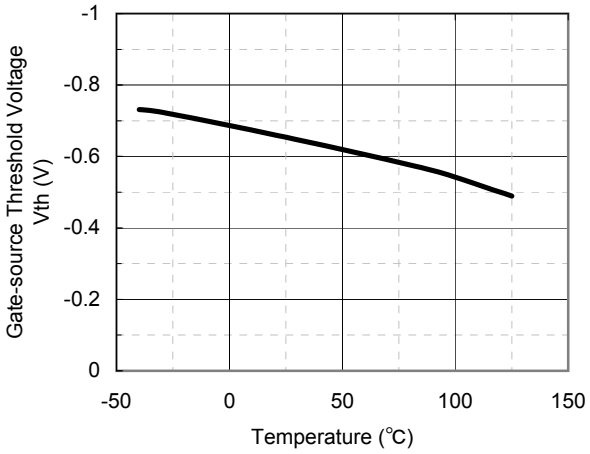
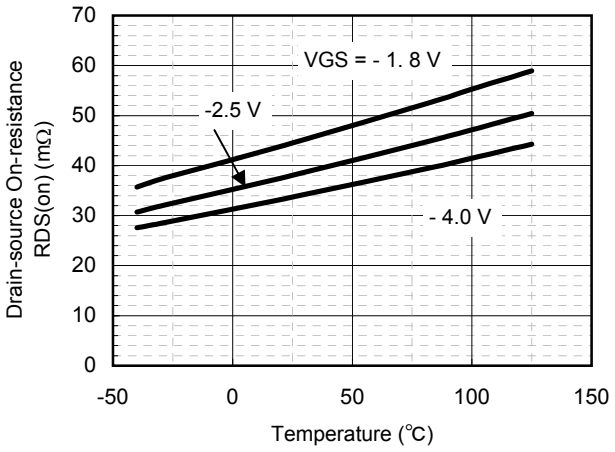
Technical Data (reference)

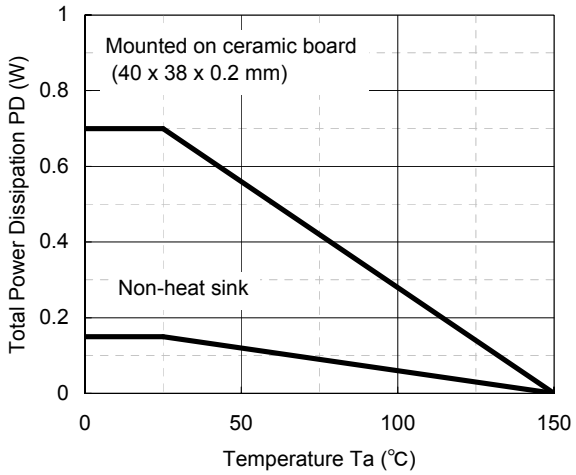
Vth - Ta



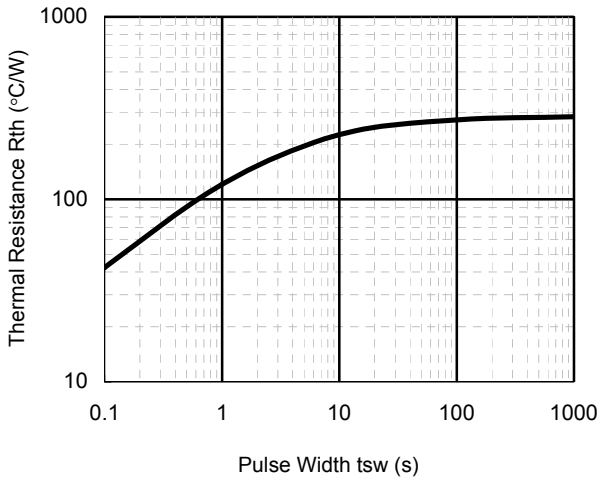
RDS(on) - Ta



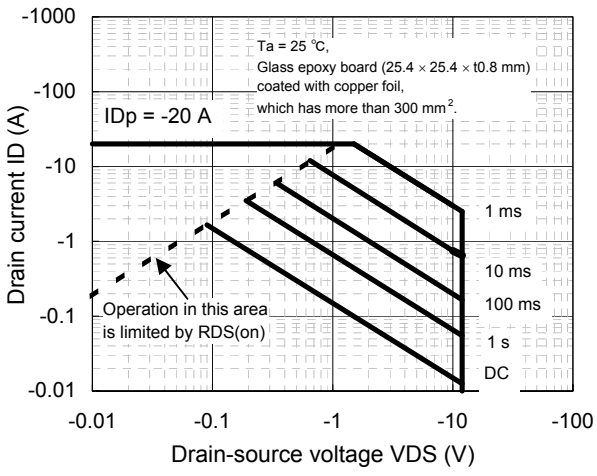
PD - Ta



Rth - tsw



Safe Operating Area



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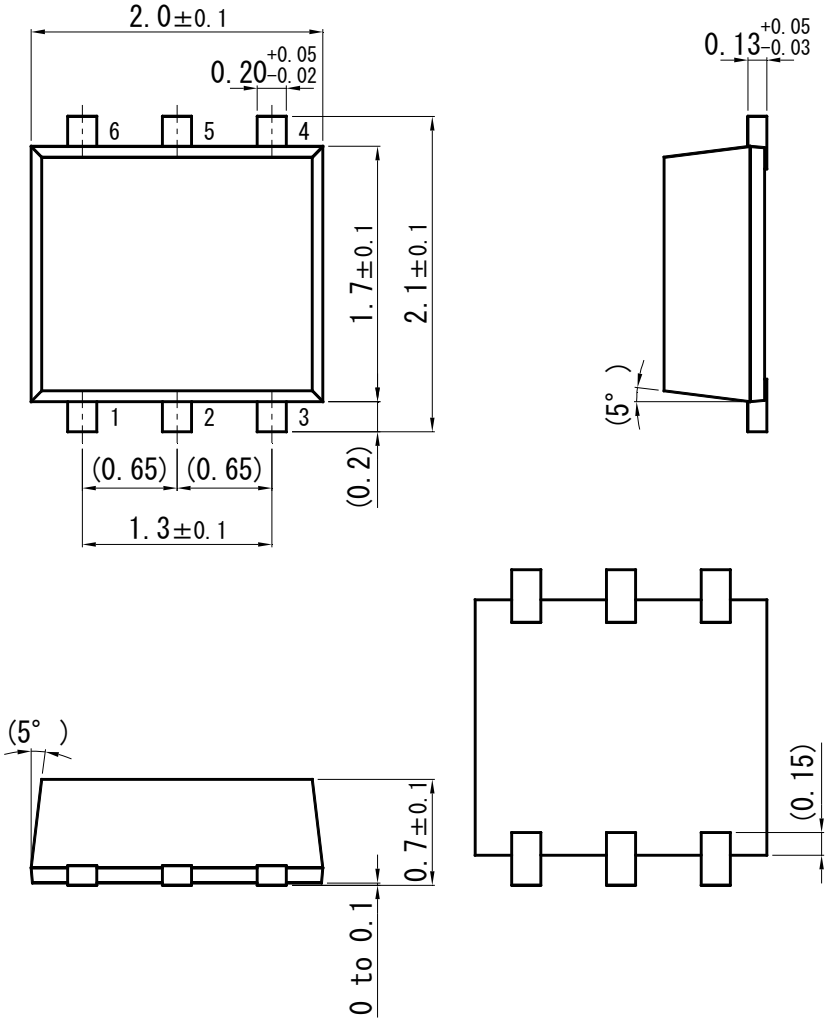
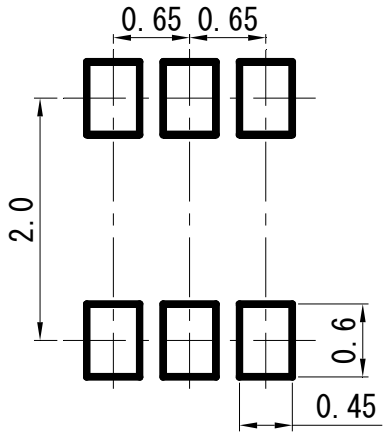
WSMini6-F1-B

Unit : mm



■ Land Pattern (Reference) (Unit : mm)



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