MOS FET

MTM761100LBF

Panasonic

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)

■ Absolute Maximum Ratings Ta = 25 °C

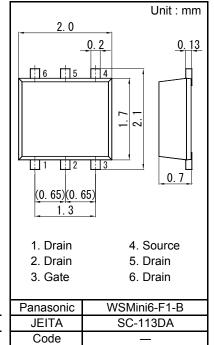
Parameter	Symbol	Rating	Unit
Drain to Source Voltage	VDS	-12	V
Gate to Source Voltage	VGS	±8	V
Drain Current	ID	-4.0	Α
Drain Current (Pulsed) *1	IDp	-16	Α
Total Power Dissipation *2	PD	700	mW
Channel Temperature	Tch	150	
Operating ambient temperature	Topr	-40 to +85	°C
Storage Temperature Range	Tstg	-55 to +150	

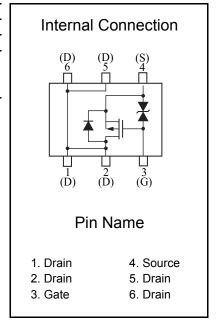
Note: *1 Pulse width \leq 10 μ s, Duty cycle \leq 1 %

Established: 2008-01-31

: 2013-10-15

Revised





 $^{^{\}star}2$ Measuring on ceramic board at 40 mm \times 38 mm \times 0.1 mm. Absolute maximum rating PD Non-heat sink shall be made 150 mW.

Doc No. TT4-EA-10443 Revision. 2

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

Parameter	Symbol	Conditions	Min	Тур	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	μΑ
Gate-source Leakage Current	IGSS	VGS = $\pm 6.4 \text{ V}$, VDS = 0 V			±10	μΑ
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		1200		pF
Output Capacitance	Coss	f = 1 MHz		110		
Reverse Transfer Capacitance	Crss	1 - 1 1011 12		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

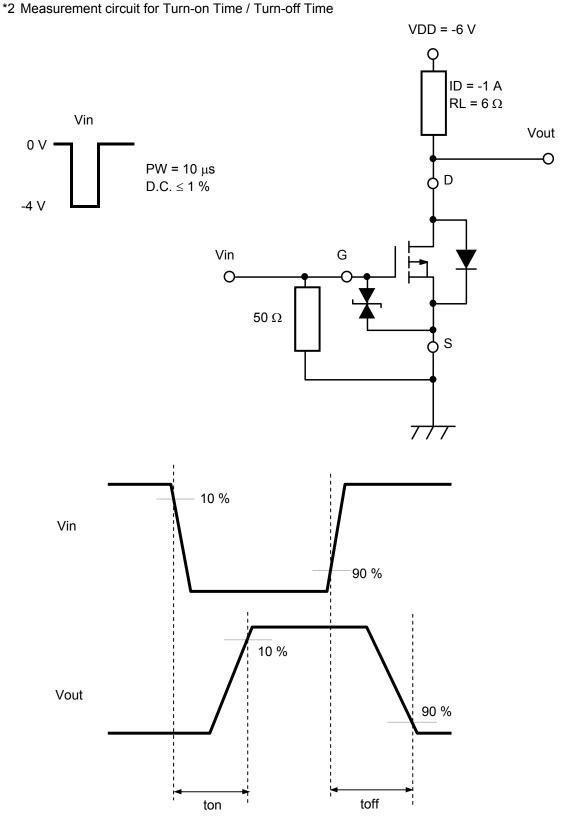
Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.

^{*1} Pulse test : Pulse width \leq 300 μ s, Duty cycle \leq 2 %

^{*2} Measurement circuit for Turn-on Time / Turn-off Time

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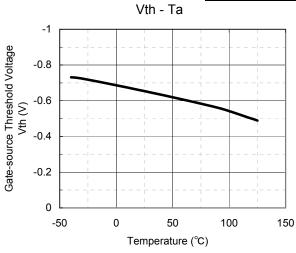


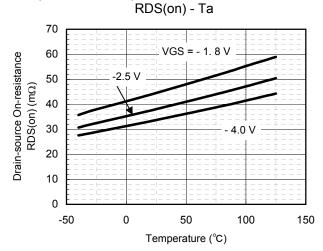
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Technical Data (reference) ID - VDS ID - VGS -0.10 -4.5 V -0.08 Drain Current ID (A) Ta = 85 ℃ -2.5 V Drain current ID (A) -0.06 2.0 V 25 °C -2 -1.5 V -0.04 VGS = -1.0 V - 40 °C -0.02 0.00 0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2 -0.1 -0.2 -0.3 -0.4 -0.5 0 Drain-source Voltage VDS (V) Gate-source voltage VGS (V) VDS - VGS RDS(on) - ID 100 -0.2 Drain source On-state Resistance Drain-source Voltage VDS (V) -2.5 V -1.8 V RDS (on) (mΩ) -0.1 ID = -2.0 AVGS = -4.5 V -1.0 A -0.5 A 0 10 0 -1 -2 -3 -4 -5 -0.1 -1 Gate-source Voltage VGS (V) Drain current ID (A) Capacitance - VDS **Dynamic Input/Output Characteristics** -6 10000 Gate-source Voltage VGS (V) VDD = -6 V Capacitance C (pF) Ciss 1000 Coss 100 Crss 0 10 0 5 10 15 20 -0.1 -1 -10 -100 Total Gate Charge Qg (nC) Drain-source Voltage VDS (V)

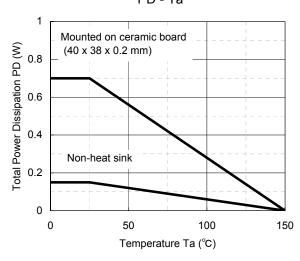
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Technical Data (reference)

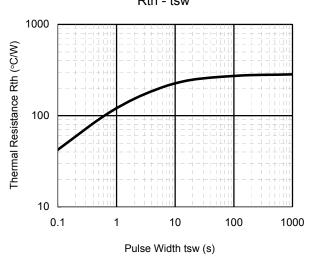




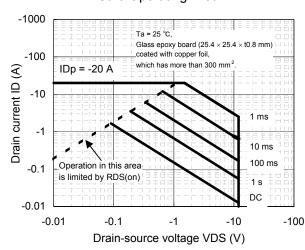
PD - Ta



Rth - tsw



Safe Operating Area

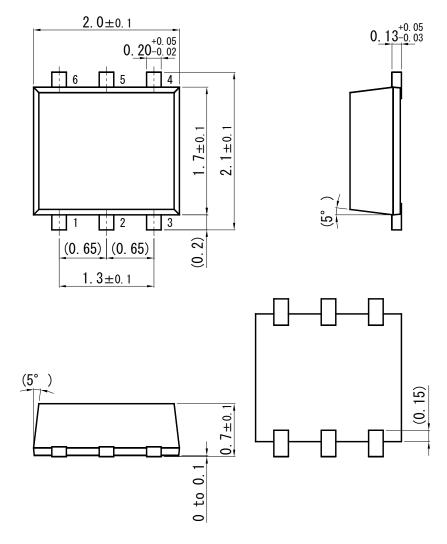


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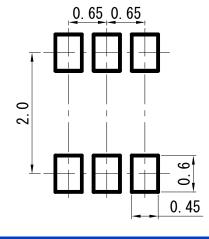
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WSMini6-F1-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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