Notification about the transfer of the semiconductor business

The semiconductor business of Panasonic Corporation was transferred on September 1, 2020 to Nuvoton Technology Corporation (hereinafter referred to as "Nuvoton"). Accordingly, Panasonic Semiconductor Solutions Co., Ltd. became under the umbrella of the Nuvoton Group, with the new name of Nuvoton Technology Corporation Japan (hereinafter referred to as "NTCJ").

In accordance with this transfer, semiconductor products will be handled as NTCJ-made products after September 1, 2020. However, such products will be continuously sold through Panasonic Corporation.

Publisher of this Document is NTCJ.
If you would find description “Panasonic” or “Panasonic semiconductor solutions”, please replace it with NTCJ.

※ Except below description page
“Request for your special attention and precautions in using the technical information and semiconductors described in this book”

Nuvoton Technology Corporation Japan

MOS FET

Panasonic

MTM761100LBF

MTM761100LBF

Silicon P-channel MOSFET

For Switching

■ Features

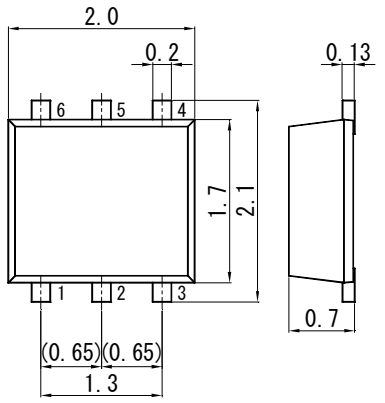
- Low Drain-source On-state Resistance : RDS(on) typ. = 30 mΩ (VGS = -4.0 V)
- Low Drive Voltage : 1.8 V Drive
- Halogen-free / RoHS compliant
  (EU RoHS / UL-94 V-0 / MSL : Level 1 compliant)

■ 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

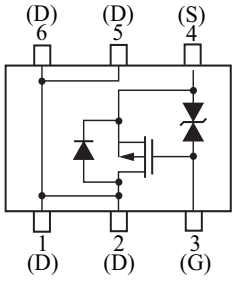
Panasonic	WSMini6-F1-B
JEITA	SC-113DA
Code	—

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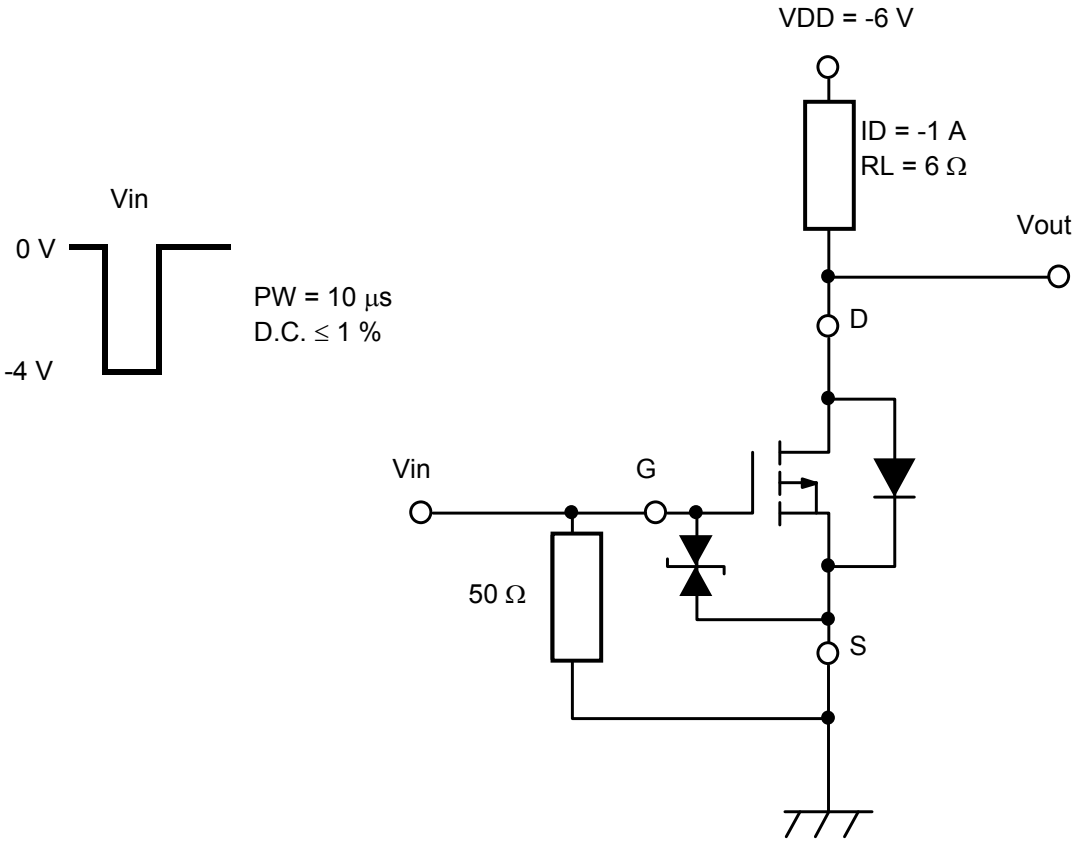
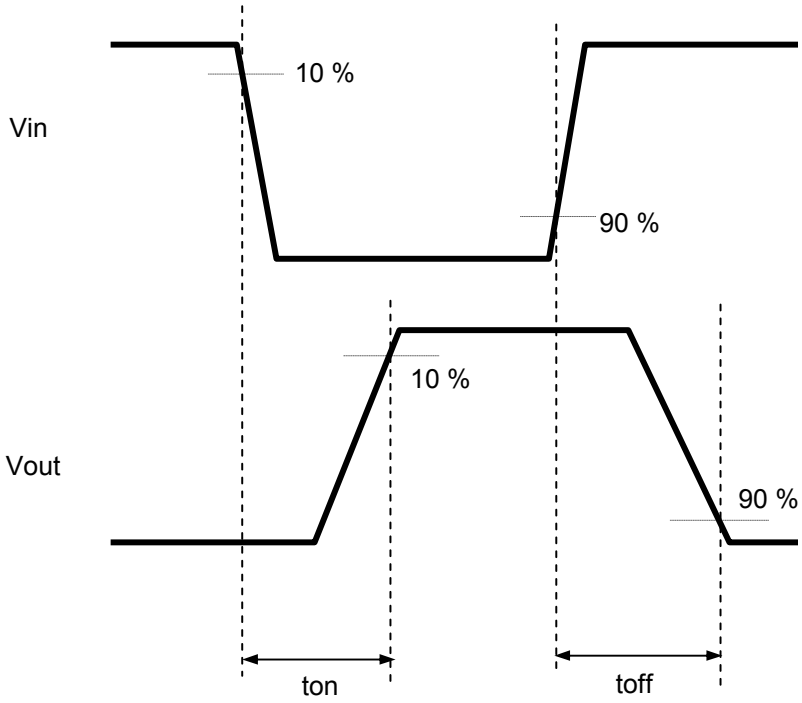
*2 Measurement circuit for Turn-on Time / Turn-off Time





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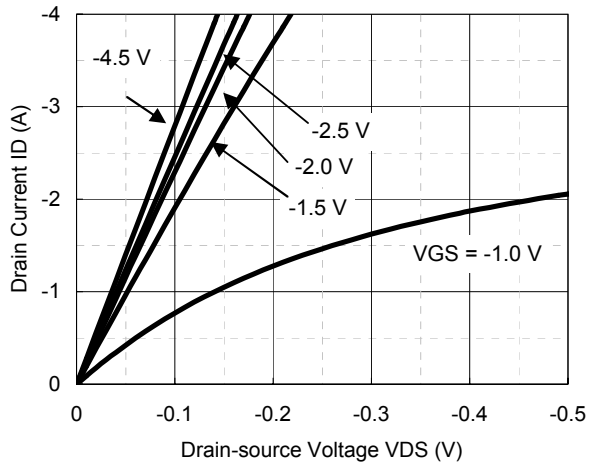
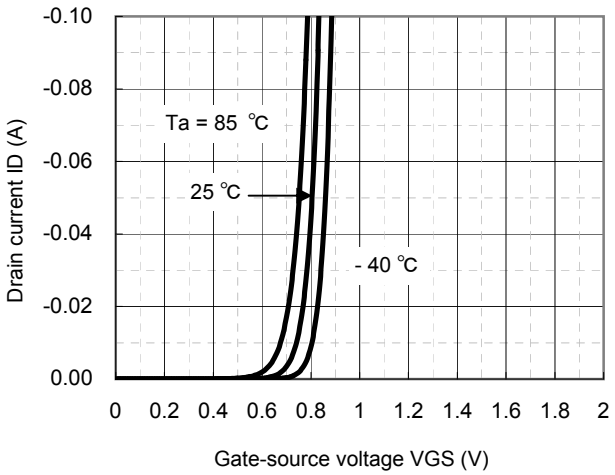
Technical Data (reference)

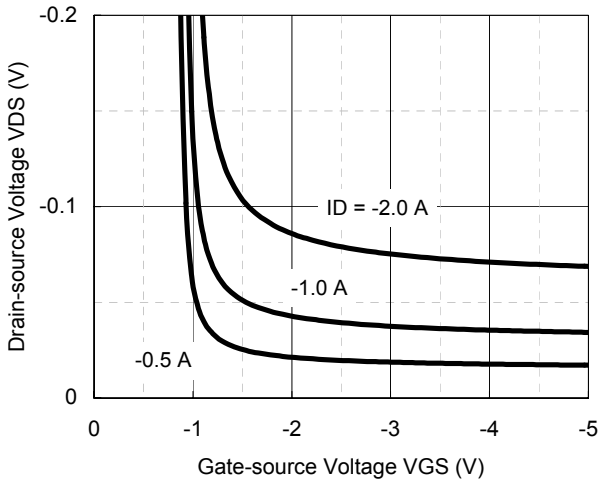
ID - VDS



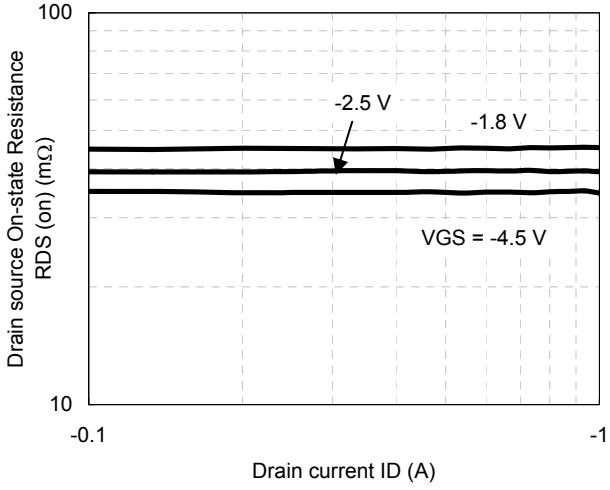
ID - VGS



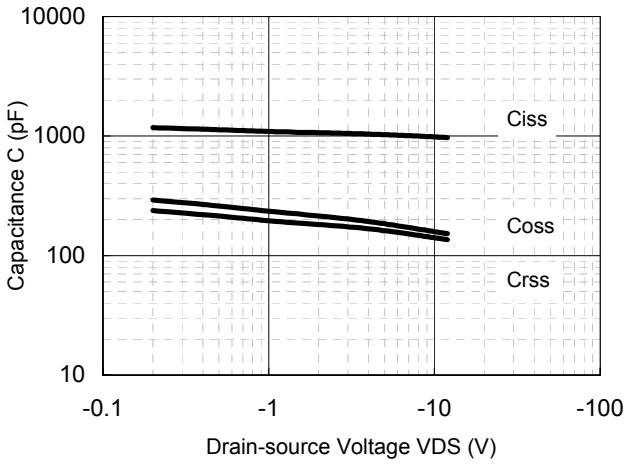
VDS - VGS



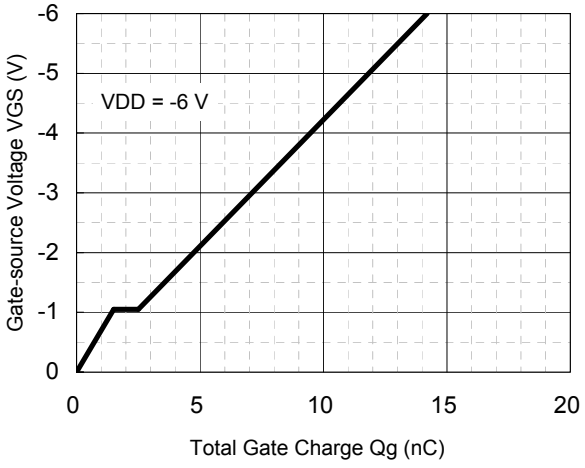
RDS(on) - ID



Capacitance - VDS



Dynamic Input/Output Characteristics



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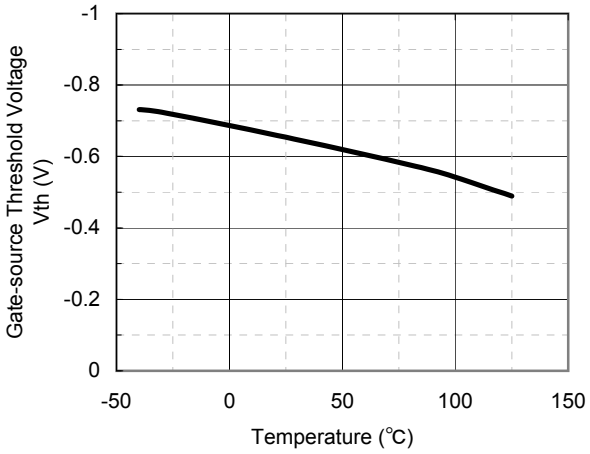
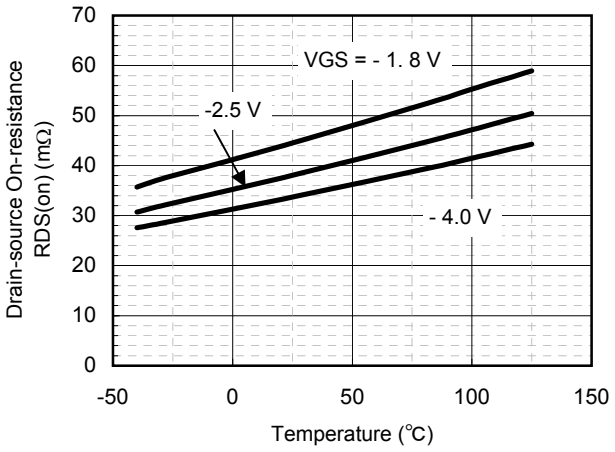
Technical Data (reference)

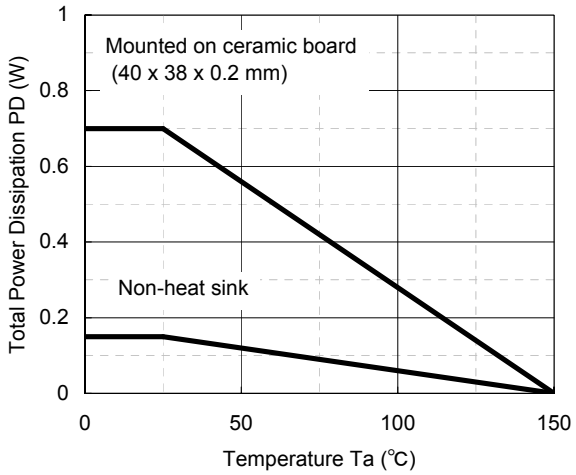
Vth - Ta



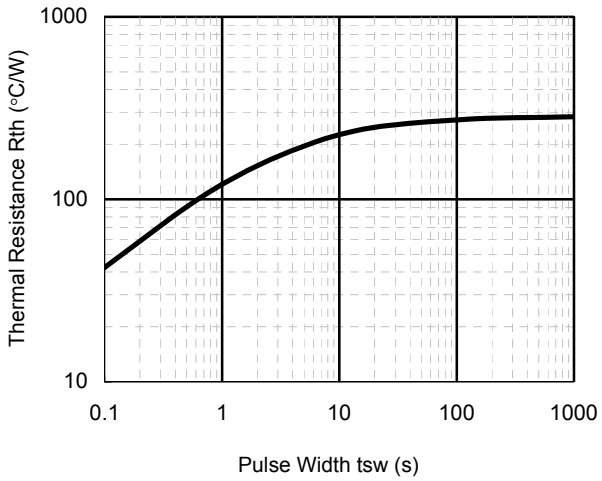
RDS(on) - Ta



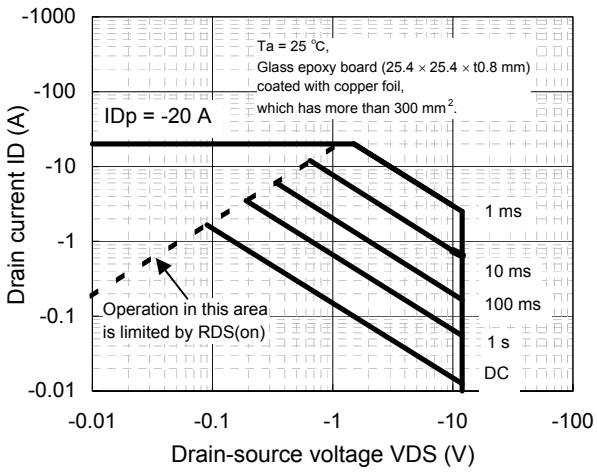
PD - Ta



Rth - tsw



Safe Operating Area



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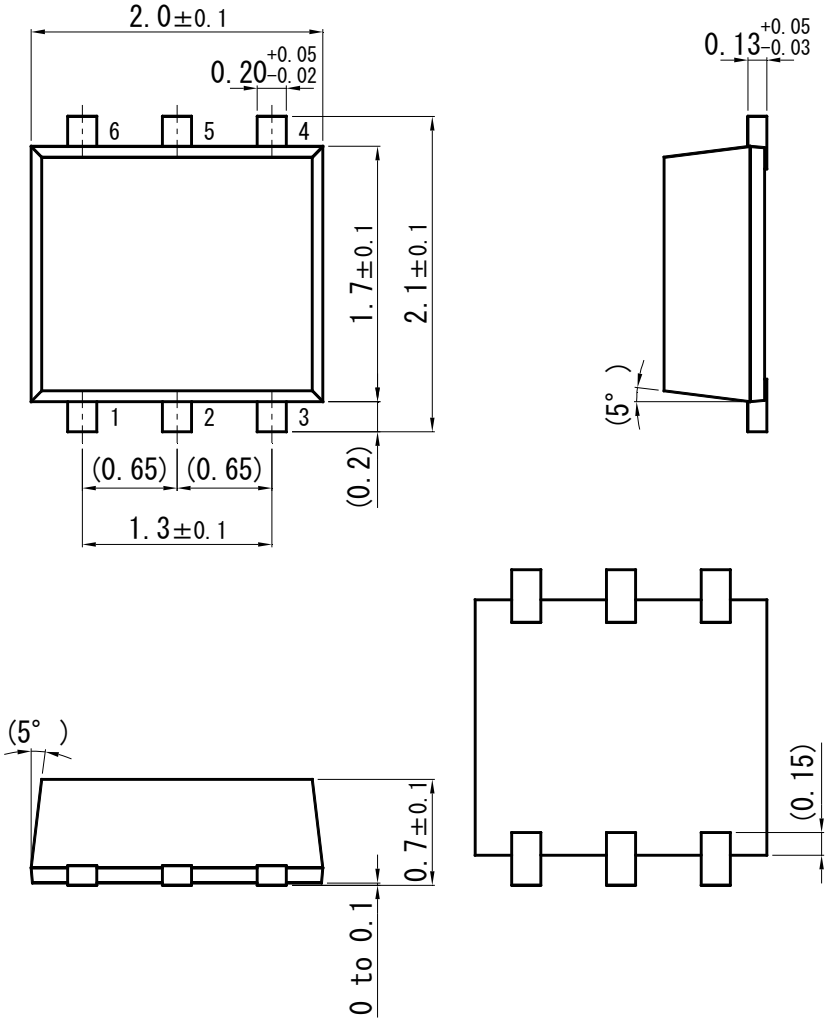
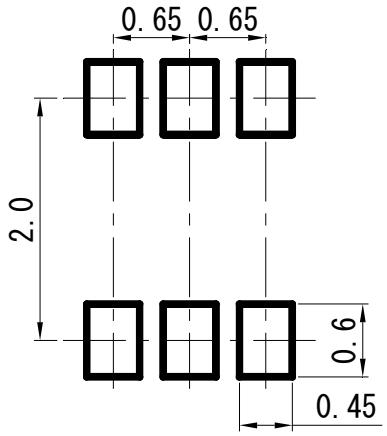
WSMini6-F1-B

Unit : mm



■ Land Pattern (Reference) (Unit : mm)



Established : 2008-01-31
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