

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

FK3306010L

Silicon N-channel MOSFET

For switching
 FK350601 in SSSMini3 type package

■ Features

- Low drive voltage : 2.5 V drive
- Halogen-free / RoHS compliant
 (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

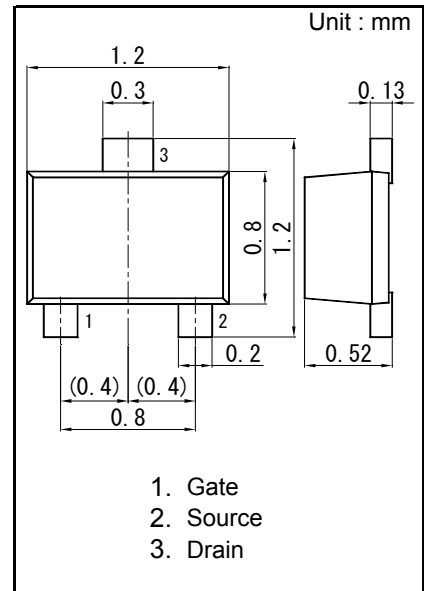
■ Marking Symbol : CV

■ Packaging

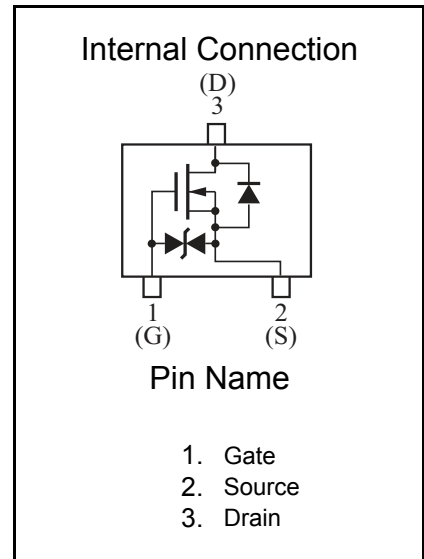
Embossed type (Thermo-compression sealing) : 10 000 pcs / reel (standard)

■ Absolute Maximum Ratings $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Drain-source voltage	VDS	60	V
Gate-source voltage	VGS	± 12	V
Drain current	ID	100	mA
Pulse drain current	IDp	200	mA
Total power dissipation	PD	100	mW
Channel temperature	Tch	150	$^\circ\text{C}$
Operating Ambient Temperature	Tstg	-40 to +85	$^\circ\text{C}$
Storage temperature	Tstg	-55 to +150	$^\circ\text{C}$



Panasonic	SSSMini3-F2-B
JEITA	SC-105AA
Code	SOT-723

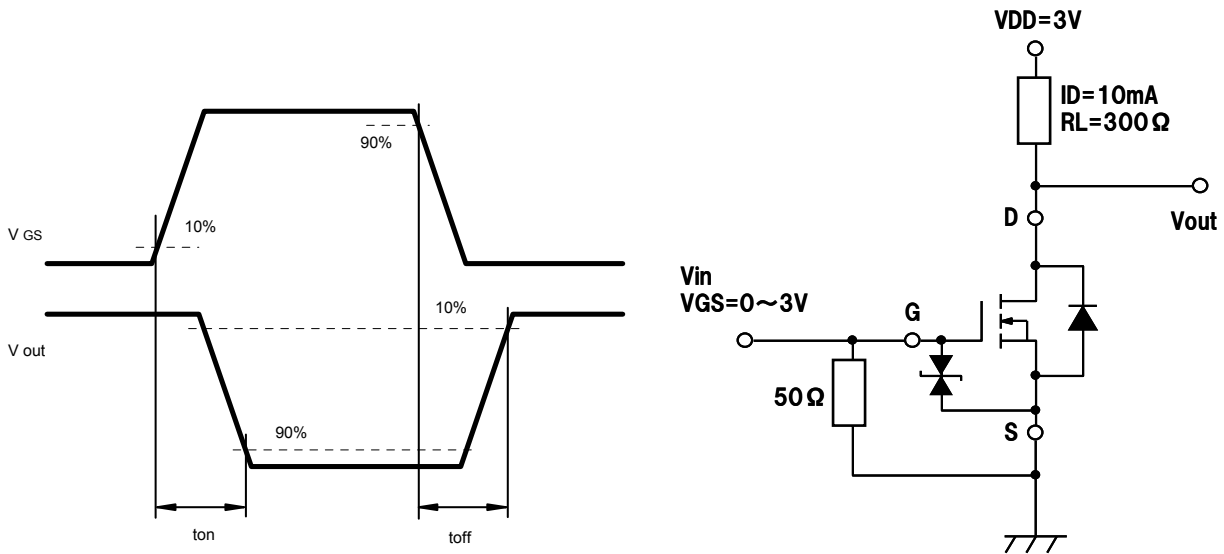


■ Electrical Characteristics Ta = 25 °C ± 3 °C

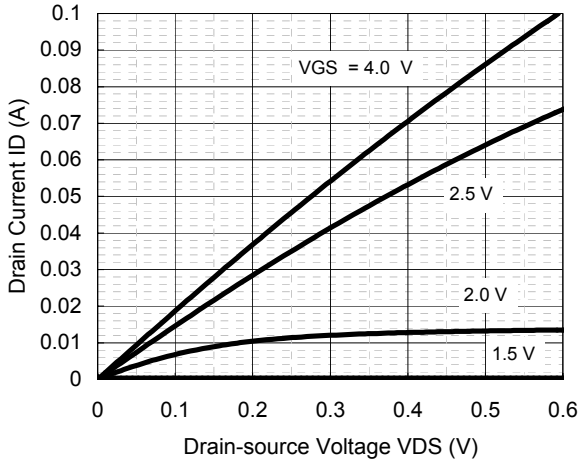
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Drain-source breakdown voltage	V _{DSS}	ID = 1 mA, V _{GS} = 0	60			V
Drain-source cutoff current	IDSS	V _{DS} = 60 V, V _{GS} = 0			1.0	μA
Gate-source cutoff current	IGSS	V _{GS} = ±10 V, V _{DS} = 0			±10	μA
Gate threshold voltage	V _{TH}	ID = 1.0 μA, V _{DS} = 3.0 V	0.9	1.2	1.5	V
Drain-source ON resistance	R _{DS(on)1}	ID = 10 mA, V _{GS} = 2.5 V		8	15	Ω
	R _{DS(on)2}	ID = 10 mA, V _{GS} = 4.0 V		6	12	Ω
Forward transfer admittance	Y _{fs}	ID = 10 mA, V _{DS} = 3 V, f = 1 kHz	20	60		mS
Input capacitance	C _{iss}	V _{DS} = 3 V, V _{GS} = 0, f = 1 MHz		12		pF
Output capacitance	C _{oss}			7		pF
Reverse transfer capacitance	C _{rss}			3		pF
Turn-on time *1	ton	V _{DD} = 3 V, V _{GS} = 0 to 3 V, RL = 300 Ω		100		ns
Turn-off time *1	toff	V _{DD} = 3 V, V _{GS} = 3 to 0 V, RL = 300 Ω		100		ns

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.

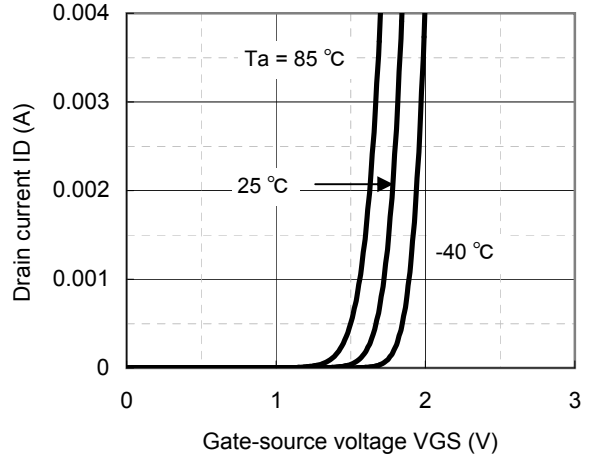
2. *1 Turn-on and Turn-off test circuit



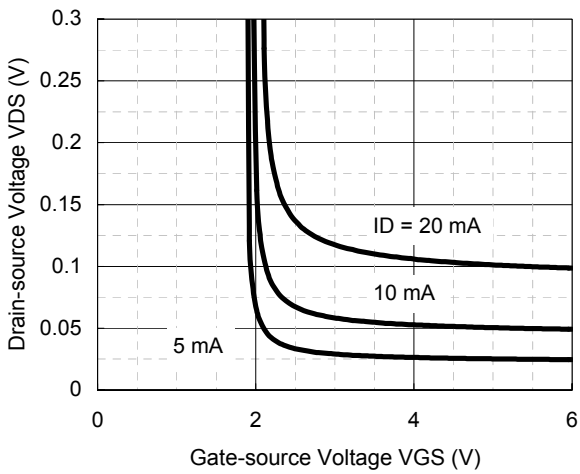
ID - VDS



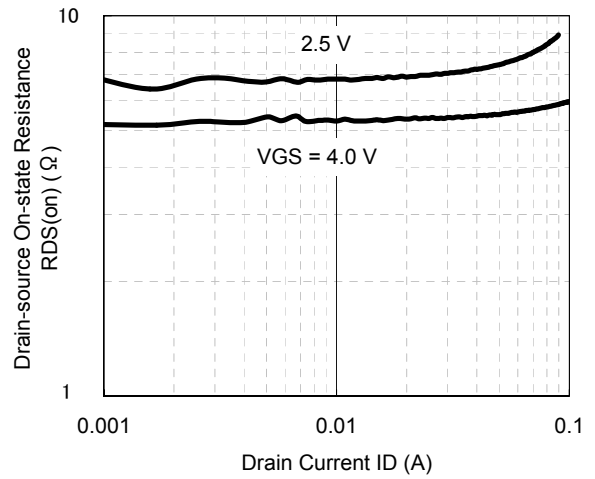
ID - VGS



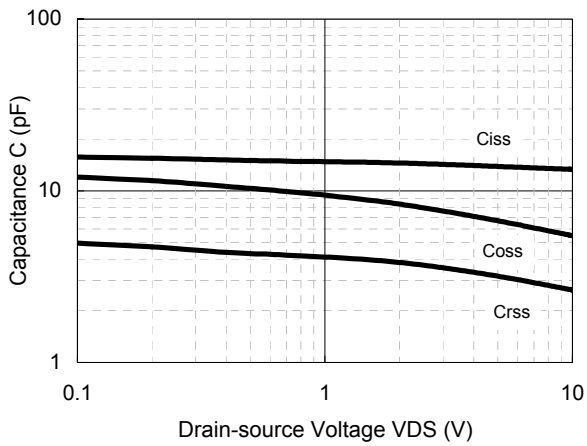
VDS - VGS



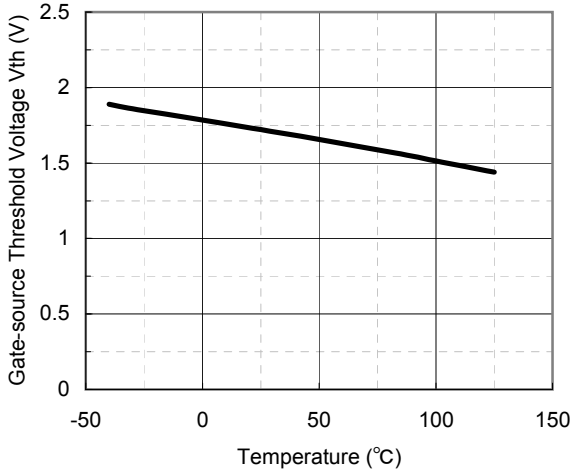
RDS(on) - ID



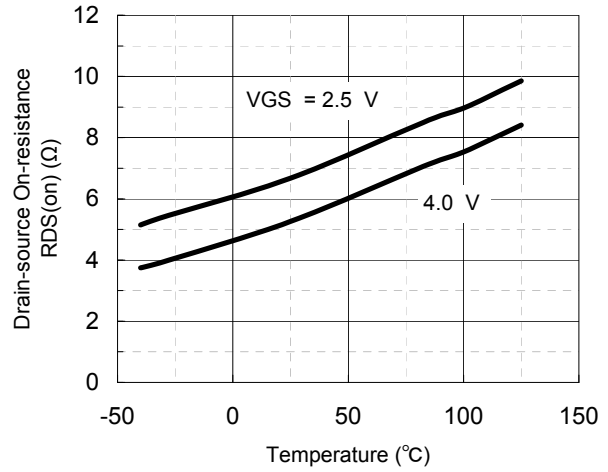
Capacitance - VDS



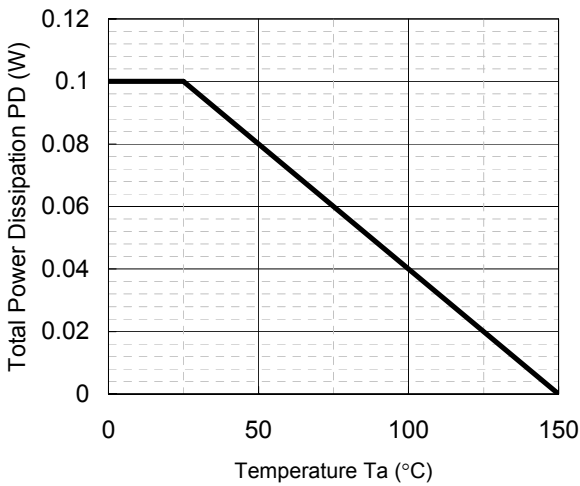
Vth - Ta



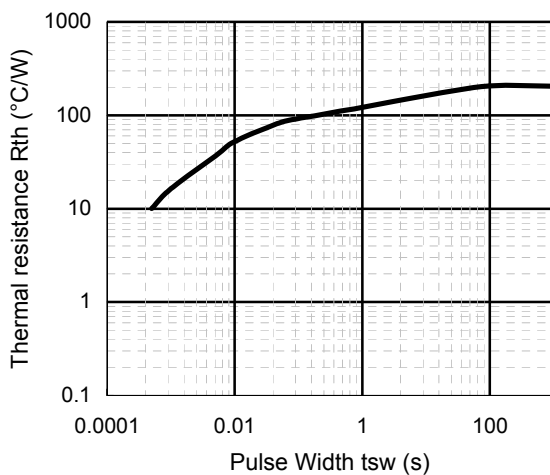
RDS(on) - Ta



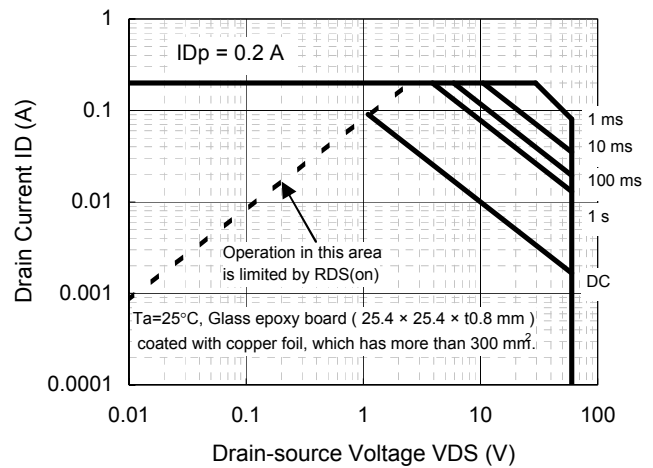
PD - Ta



Rth -tsw

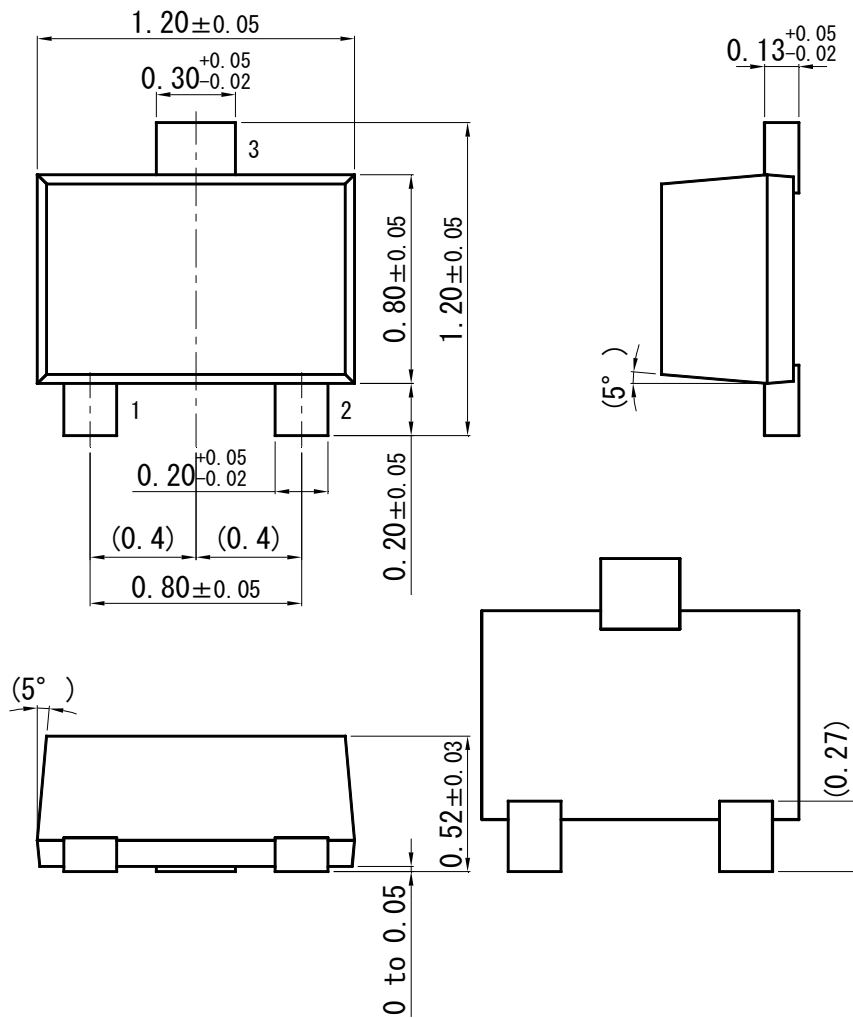


Safe Operating Area

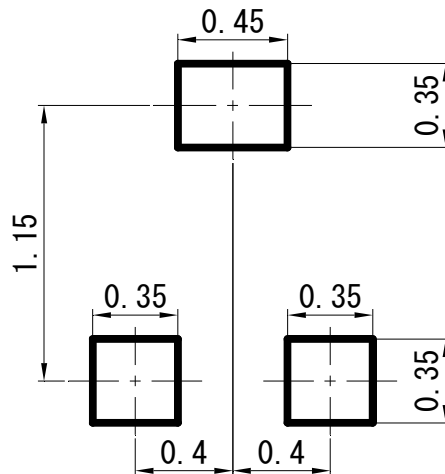


SSSMini3-F2-B

Unit : mm



■ Land Pattern (Reference) (Unit : mm)



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