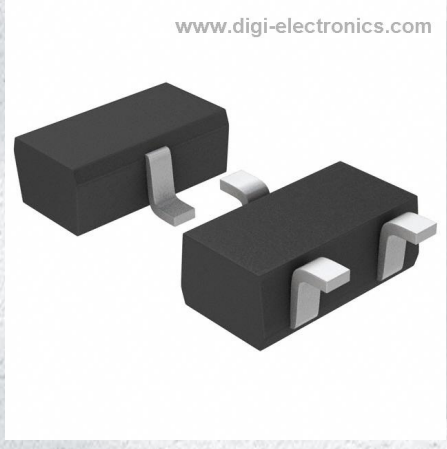
FJ3303010L Datasheet



DiGi Electronics Part Number	FJ3303010L-DG
Manufacturer	Panasonic Electronic Components
Manufacturer Product Number	FJ3303010L
Description	MOSFET P-CH 30V 100MA SSSMINI3
Detailed Description	P-Channel 30 V 100mA (Ta) 100mW (Ta) Surface Mount SSSMini3-F2-B

https://www.DiGi-Electronics.com

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
FJ3303010L	Panasonic Electronic Components
Series:	Product Status:
-	Obsolete
FET Type:	Technology:
P-Channel	MOSFET (Metal Oxide)
Drain to Source Voltage (Vdss):	Current - Continuous Drain (Id) @ 25°C:
30 V	100mA (Ta)
Drive Voltage (Max Rds On, Min Rds On):	Rds On (Max) @ Id, Vgs:
2.5V, 4V	7Ohm @ 10mA, 4V
Vgs(th) (Max) @ Id:	Vgs (Max):
1.5V @ 1µA	±12V
Input Capacitance (Ciss) (Max) @ Vds:	FET Feature:
12 pF @ 3 V	-
Power Dissipation (Max):	Operating Temperature:
100mW (Ta)	150°C (TJ)
Mounting Type:	Supplier Device Package:
Surface Mount	SSSMini3-F2-B
Package / Case:	
SOT-723	

Environmental & Export classification

RoHS Status:	Moisture Sensitivity Level (MSL):
RoHS Compliant	1 (Unlimited)
ECCN:	HTSUS:
EAR99	8541.21.0095

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

FJ3303010L

FJ3303010L

Silicon P-channel MOSFET

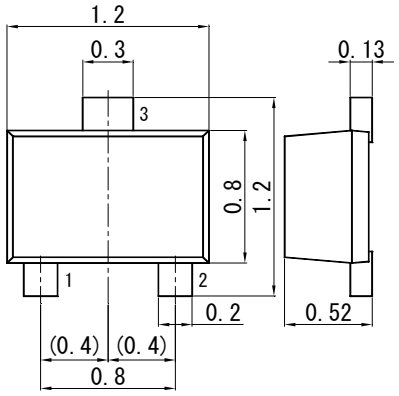
For switching
FJ350301 in SSSMini3 type package

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

■ Marking Symbol : U1

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

Unit : mm



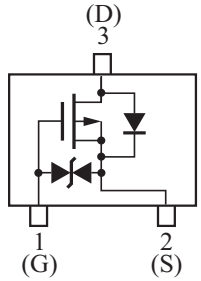
1. Gate
2. Source
3. Drain

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

■ Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Rating	Unit
Drain-source voltage	VDS	-30	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	°C
Operating ambient temperature	Topr	-40 to +85	
Storage temperature	Tstg	-55 to +150	

Internal Connection



Pin Name

1. Gate
2. Source
3. Drain

Established : 2010-06-25
Revised : 2013-10-10

MOS FET

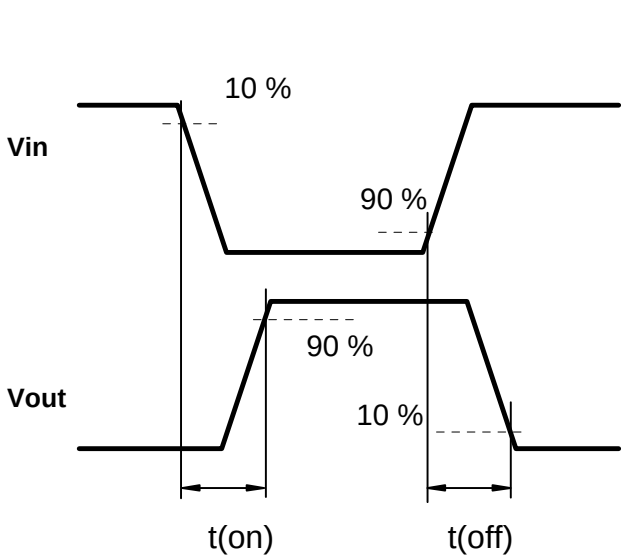
Panasonic

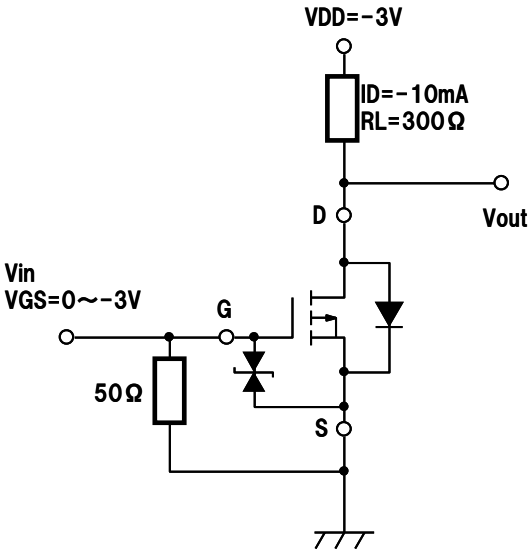
FJ3303010L

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Drain-source breakdown voltage	VDSS	ID = -1 mA, VGS = 0	-30			V
Drain-source cutoff current	IDSS	VDS = -30 V, VGS = 0			-1.0	μA
Gate-source cutoff current	IGSS	VGS = ±10 V, VDS = 0			±10	μA
Gate threshold voltage	VTH	ID = -1.0 μA, VDS = -3.0 V	-0.5	-1.0	-1.5	V
Drain-source ON resistance	RDS(on)1	ID = -10 mA, VGS = -2.5 V		7	17	Ω
	RDS(on)2	ID = -10 mA, VGS = -4.0 V		4	7	Ω
Forward transfer admittance	|Yfs|	ID = -10 mA, VDS = -3.0 V	20	40		mS
Input capacitance	Ciss	VDS = -3 V, VGS = 0, f = 1 MHz		12		pF
Output capacitance	Coss			7		pF
Reverse transfer capacitance	Crss			3		pF
Turn-on time *1	ton	VDD = -3 V, VGS = 0 to -3 V ID = -10 mA		100		ns
Turn-off time *1	toff	VDD = -3 V, VGS = -3 to 0 V ID = -10 mA		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





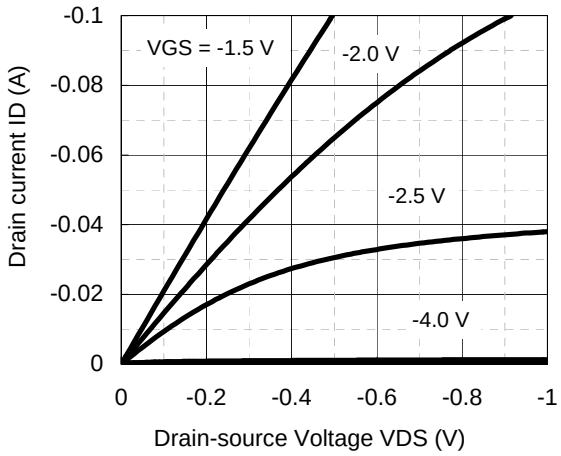
Established : 2010-06-25
Revised : 2013-10-10

MOS FET

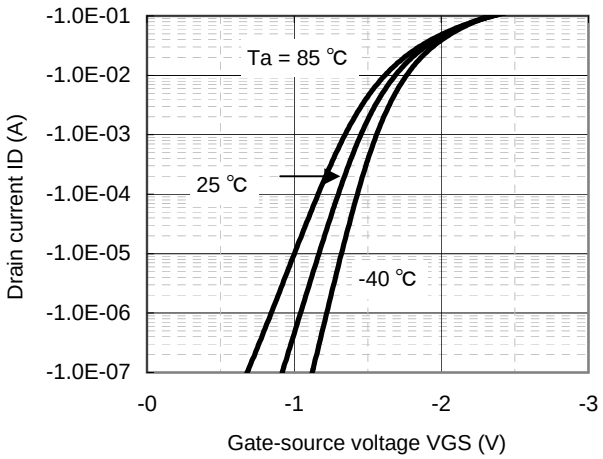
Panasonic

FJ3303010L

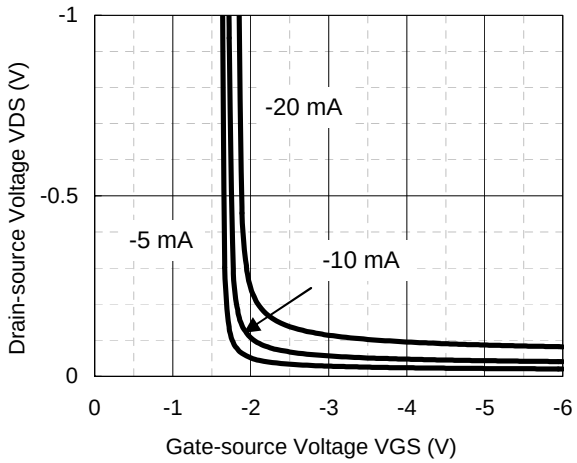
ID - VDS



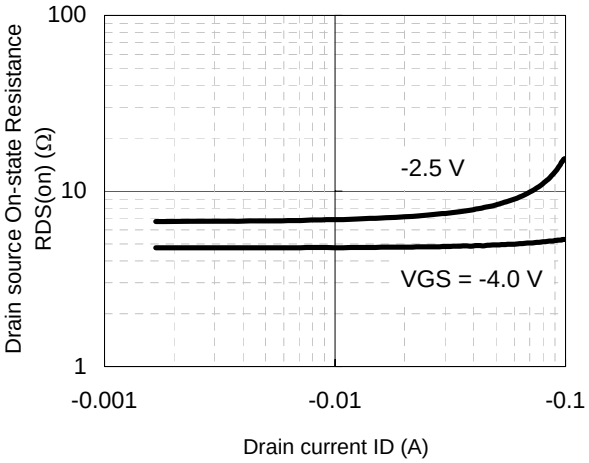
ID - VGS



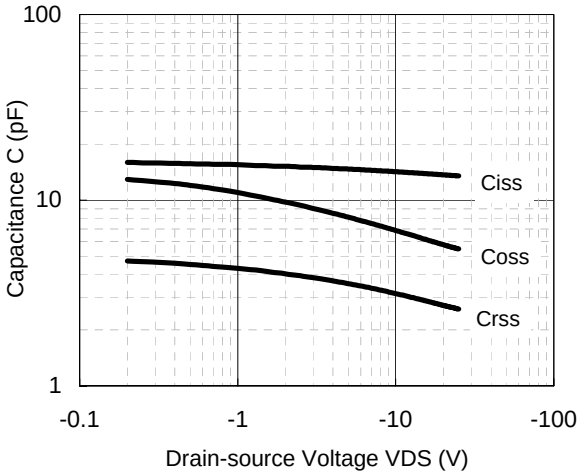
VDS - VGS



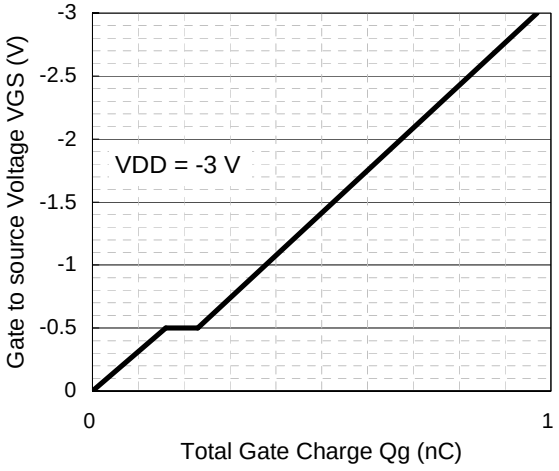
RDS(on) - ID



Capacitance - VDS

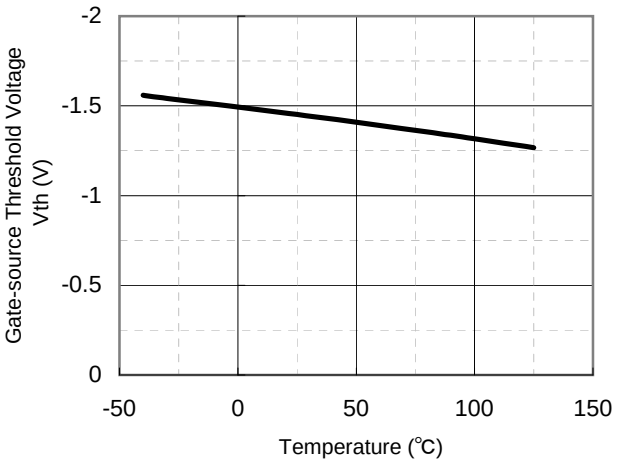


Dynamic Input/Output Characteristics

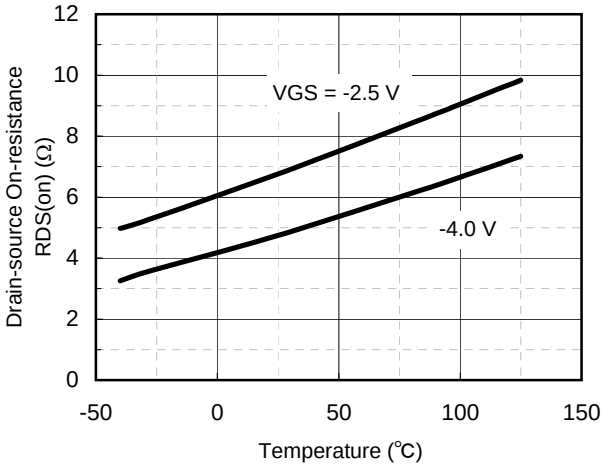


Established : 2010-06-25
Revised : 2013-10-10

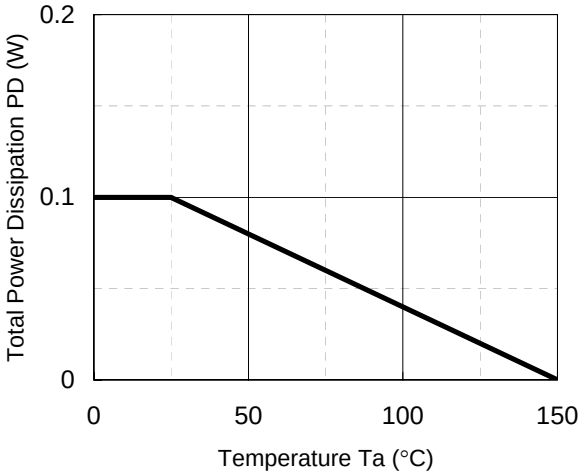
Vth - Ta



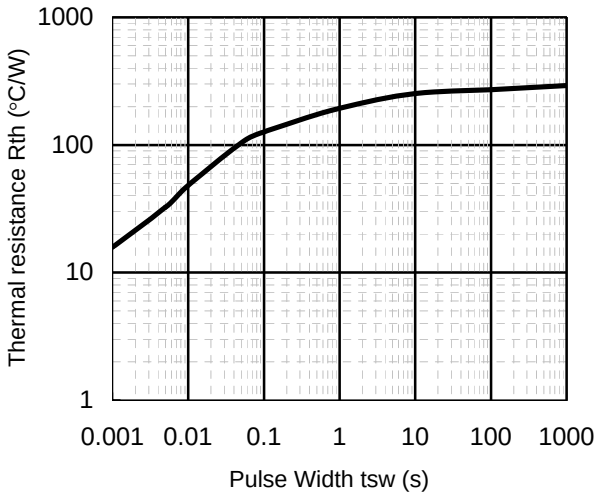
RDS(on) - Ta



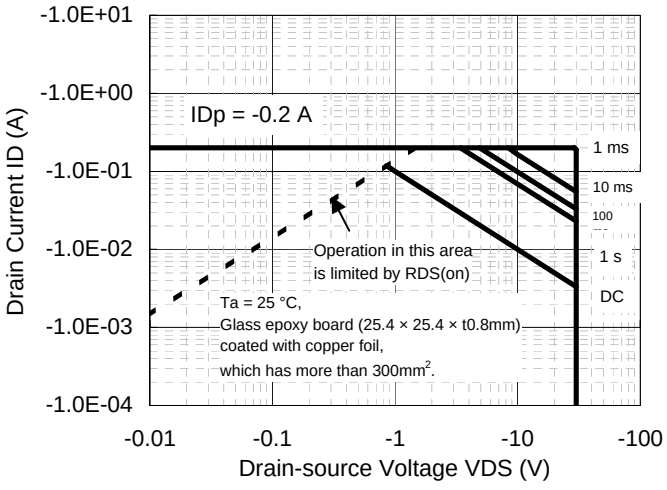
PD - Ta



Rth -tsw



Safe Operating Area



Established : 2010-06-25
Revised : 2013-10-10

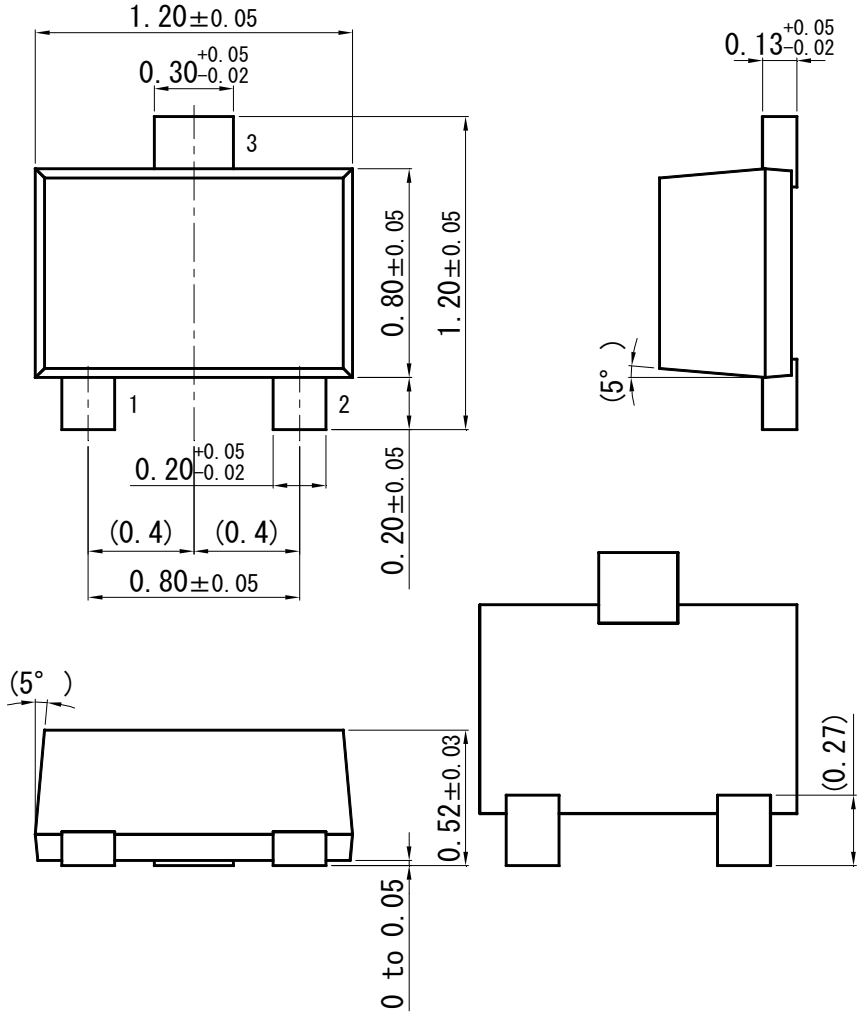
MOS FET

Panasonic

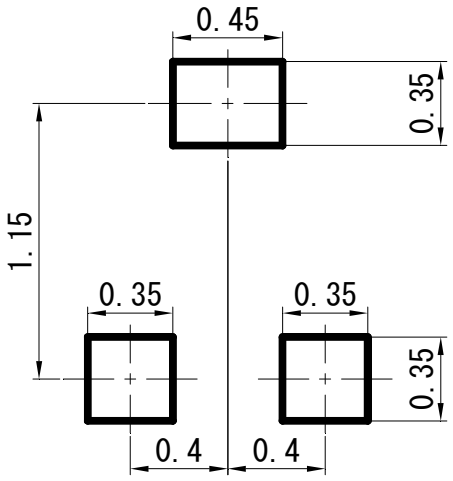
FJ3303010L

SSSMini3-F2-B

Unit : mm



■ Land Pattern (Reference) (Unit : mm)



Established : 2010-06-25
Revised : 2013-10-10

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