Doc No. TT4-EA-12667

Revision. 3

MOS FET

## FC6546010R

## **Panasonic**

## FC6546010R

#### **Dual N-channel MOS FET**

## For switching

#### Features

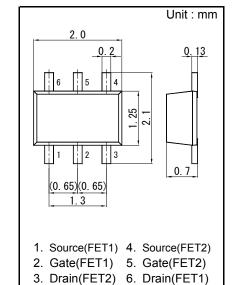
- Low drive voltage: 2.5 V drive
- · Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)
- Marking Symbol V6
- Basic Part Number : Dual FK350601 (Individual)

#### ■ Packaging

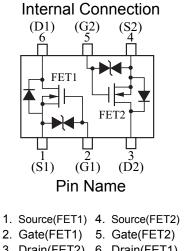
Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

■ Absolute Maximum Ratings Ta = 25 °C

Parameter		Symbol	Rating	Unit
	Drain-source breakdown voltage	VDSS	60	V
	Gate-source breakdown voltage	VGSS	±12	V
	Drain current	ID	100	mA
	Pulse drain current	IDp	200	mA
Overall	Total power dissipation	PT	150	mW
	Channel temperature	Tch	150	°C
	Operating ambient temperature	Topr	-40 to + 85	°C
	Storage temperature	Tstg	-55 to +150	°C



SMini6-F3-B Panasonic JEITA SC-113DB Code SOT-363



- 3. Drain(FET2) 6. Drain(FET1)

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## ■ Electrical Characteristics Ta = 25 °C ± 3 °C FET1,FET2

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Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Drain-source breakdown voltage	VDSS	ID = 1 mA, VGS = 0	60			V
Drain-source cutoff current	IDSS	VDS = 60 V, VGS = 0			1.0	μΑ
Gate-source cutoff current	IGSS	VGS = ±10 V, VDS = 0			±10	μΑ
Gate threshold voltage	VTH	ID = 1.0 μA, VDS = 3.0 V	0.9	1.2	1.5	V
Drain-source ON resistance	RDS(on)1	ID = 10 mA, VGS = 2.5 V		8	15	Ω
Diain-source On resistance	RDS(on)2	ID = 10 mA, VGS = 4.0 V		6	12	Ω
Forward transfer admittance	Yfs	ID = 10 mA, VDS = 3.0 V	20	60		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		100		ns
rum-on ume		ID = 10 mA		100		
Turn-off time *1	toff	VDD = 3 V, VGS = 3 to 0 V		100		ns
rum-on ume	ton	ID = 10 mA				

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

Established: 2010-07-02

Revised

: 2013-08-26

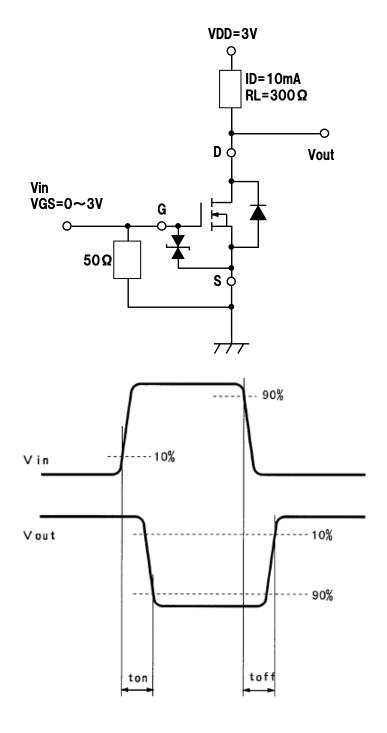
<sup>2. \*1</sup> Turn-on and Turn-off test circuit

MOS FET

# **Panasonic**

Established: 2010-07-02 Revised: 2013-08-26

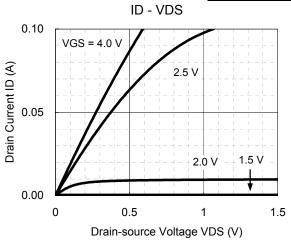
\*1 Turn-on, Turn-off measurement circuit



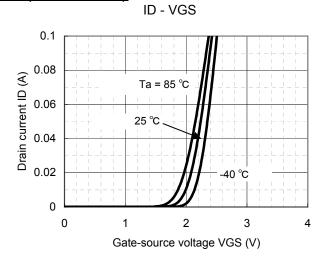
**Panasonic** 

MOS FET **FC6546010R** 

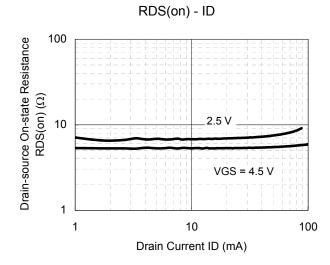
## Technical Data (reference)

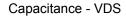


VDS - VGS

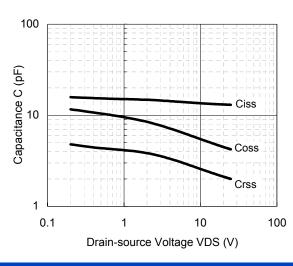


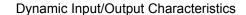
0.3 OD 0.25 OD 0.25 OD 0.15 OD 0.25 OD 0.15 OD 0.25 OD 0.25 OD 0.15 OD 0.25 OD 0.25

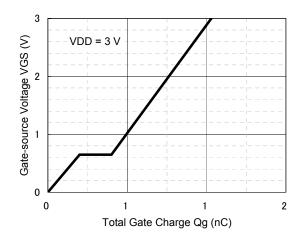




Gate-source Voltage VGS (V)





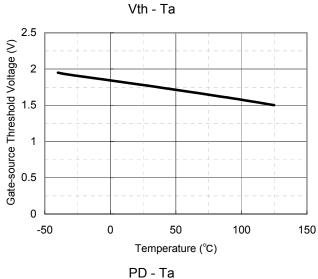


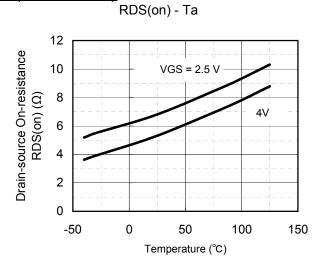
**Panasonic** 

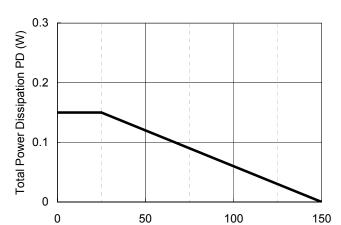
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## Technical Data (reference)







Temperature Ta (°C)

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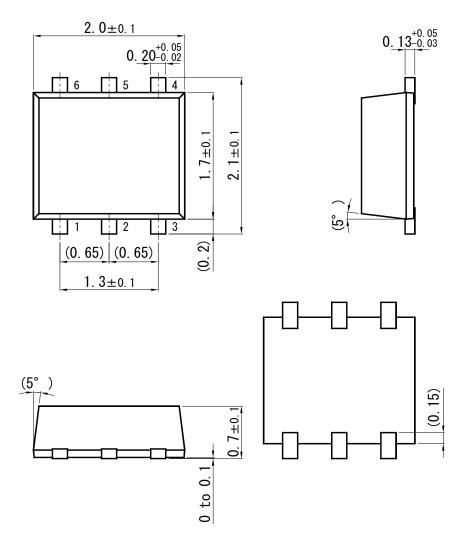
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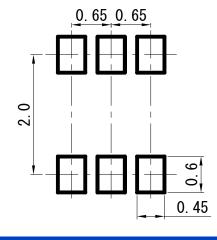
FC6546010R

SMini6-F3-B

Unit: mm



■ Land Pattern (Reference) (Unit : mm)



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