

# FC6546010R

Dual N-channel MOSFET

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

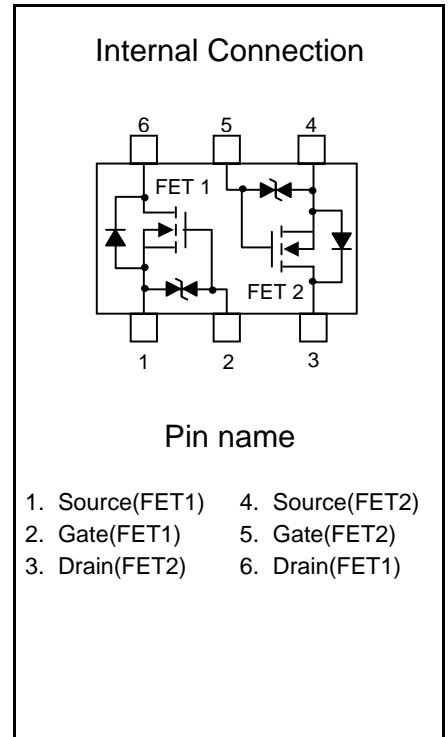
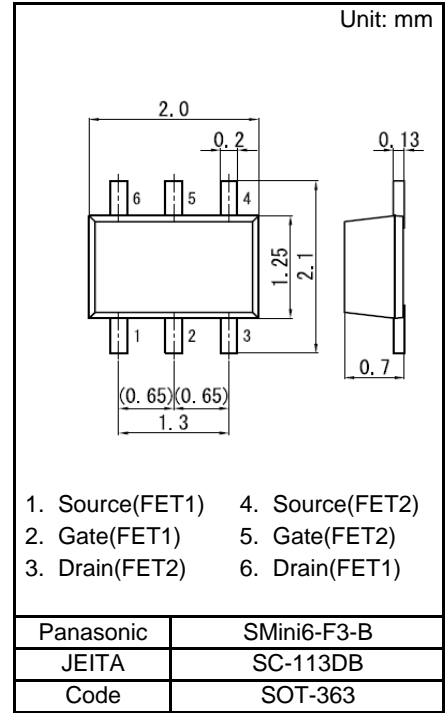
Dual FK350601 (Individual)

■ Packaging

FC6546010R Embossed type (Thermo-compression sealing):  
3 000 pcs / reel (standard)

■ Absolute Maximum Ratings Ta = 25 °C

Parameter		Symbol	Rating	Unit
FET1	Drain-source Voltage	VDS	60	V
	Gate-source Voltage	VGS	±12	V
FET2	Drain Current	ID	100	mA
	Drain Current (Pulsed)	IDp	200	mA
Total Power Dissipation		PD	150	mW
Overall	Channel Temperature	Tch	150	°C
	Storage Temperature	Tstg	-55 to +150	°C



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

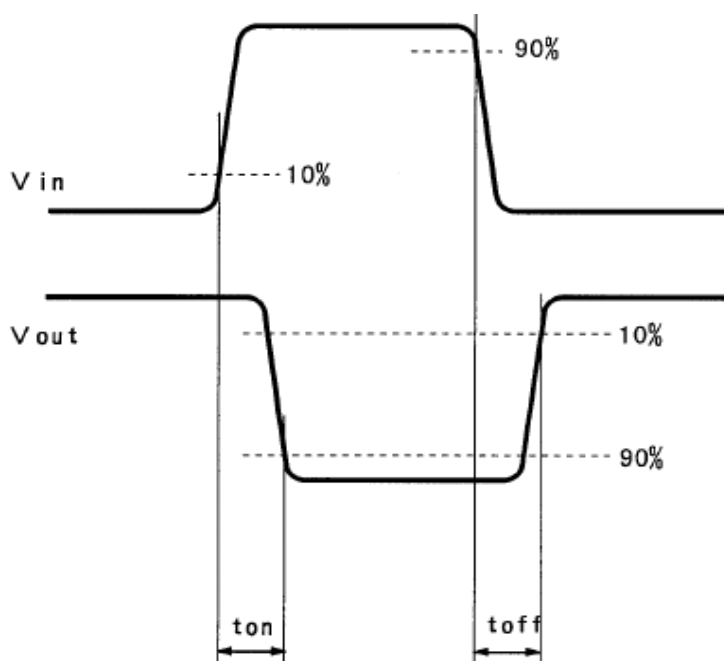
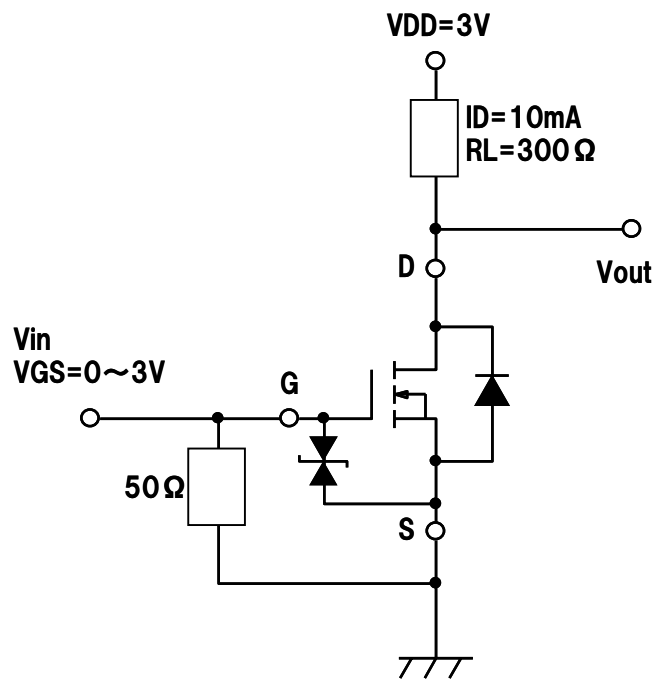
FET1,FET2 (N-ch)

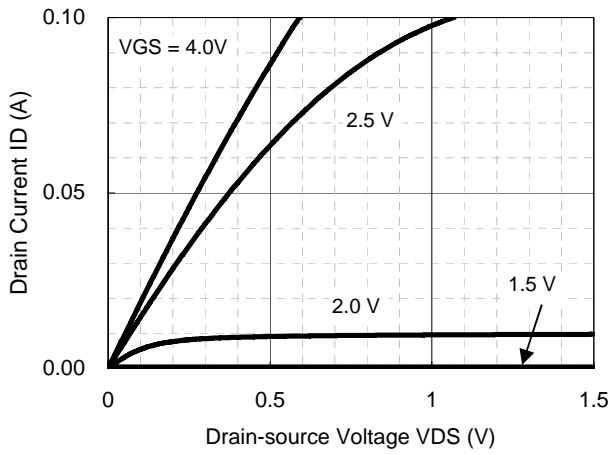
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Drain-source Breakdown Voltage	VDSS	ID = 1 mA, VGS = 0 V	60			V
Zero Gate Voltage Drain Current	IDSS	VDS = 60 V, VGS = 0 V			1.0	μA
Gate-source Leakage Current	IGSS	VGS = ±10 V, VDS = 0 V			±10	μA
Gate-source Threshold Voltage	Vth	ID = 1.0 μA, VDS = 3.0 V	0.9	1.2	1.5	V
Drain-source On-state Resistance	RDS(on)	ID = 10 mA, VGS = 2.5 V		8	15	Ω
		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 V, 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: Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.

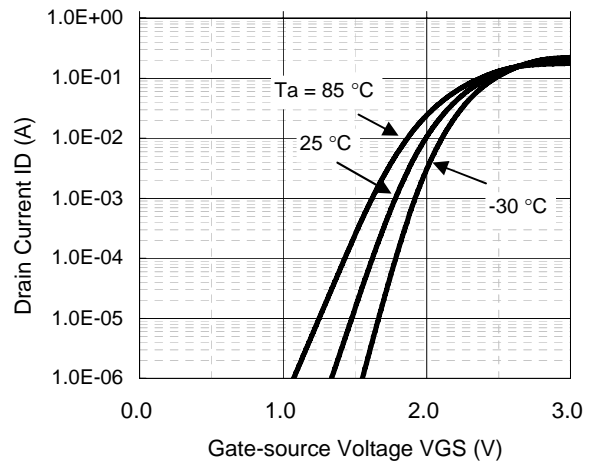
\*1 ton, toff Test Circuit

\*1 ton, toff Test Circuit

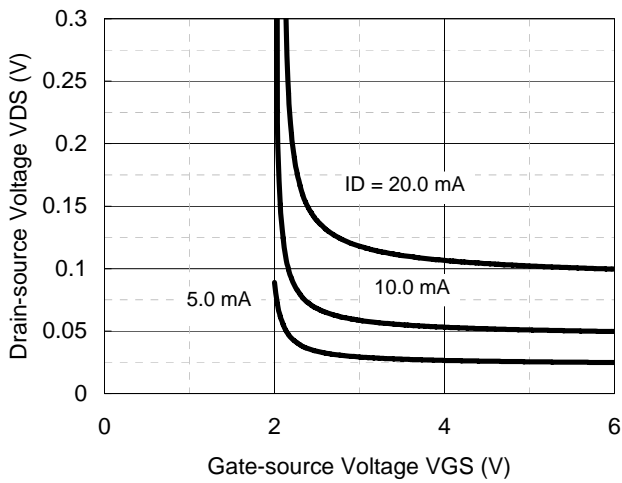




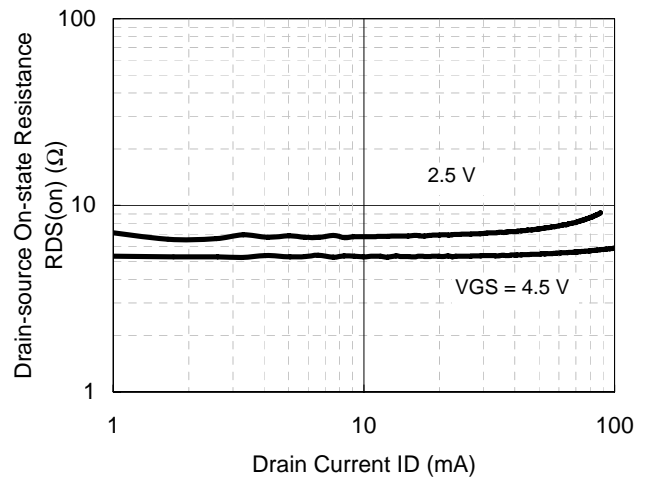
ID - VDS



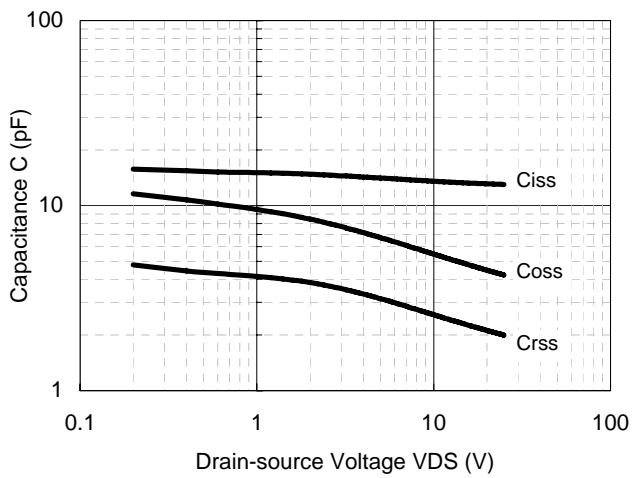
ID - VGS



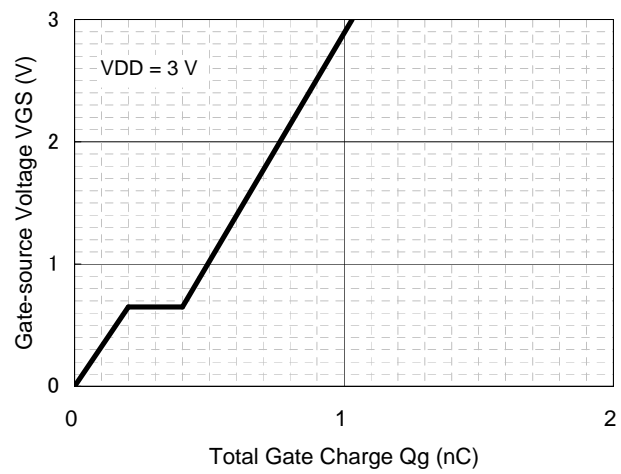
VDS - VGS



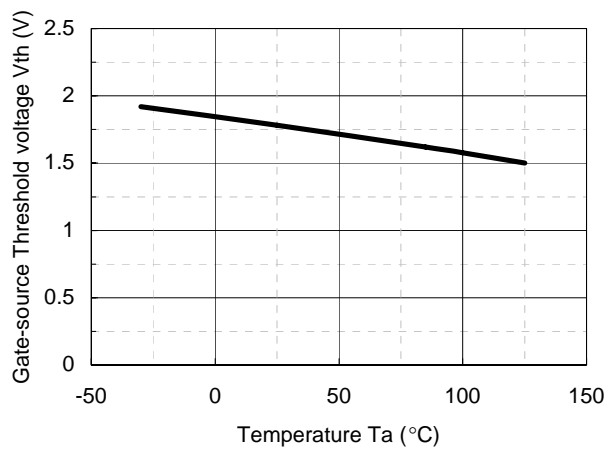
RDS(on) - ID



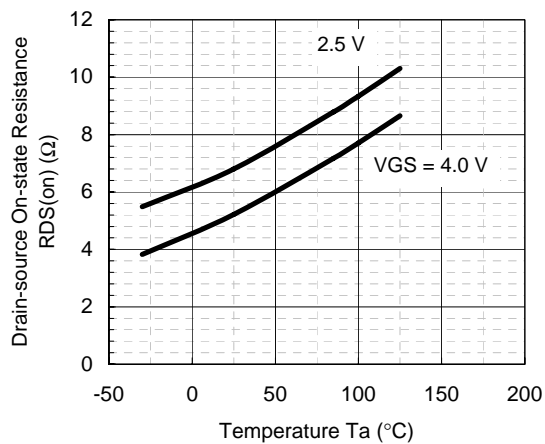
Capacitance - VDS



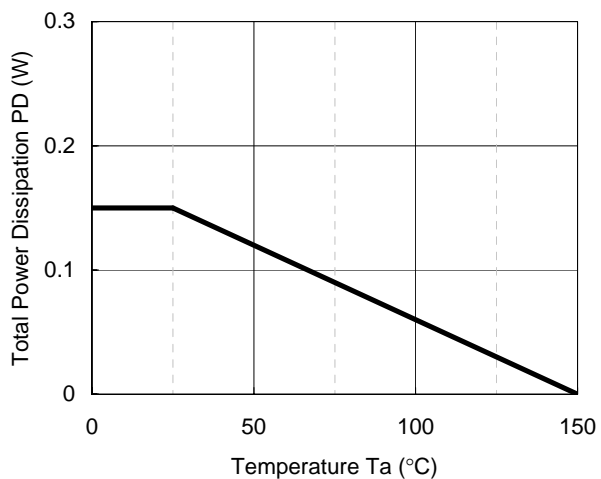
Dynamic Input/Output Characteristics



$V_{th}$  -  $T_a$



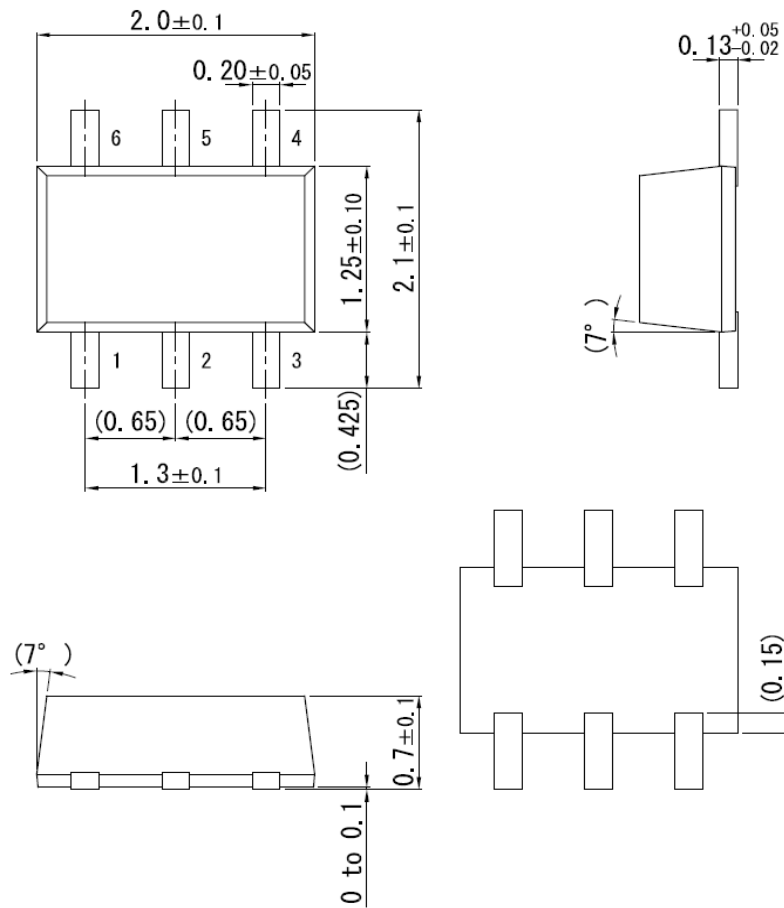
$R_{DS(on)}$  -  $T_a$



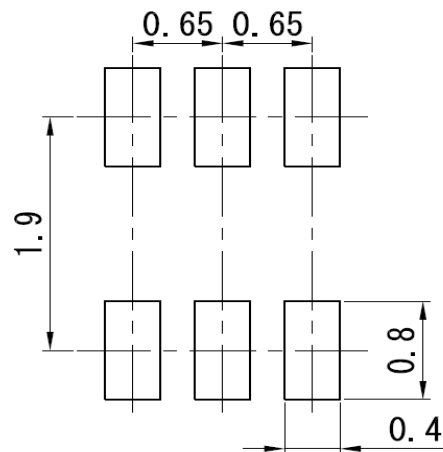
$P_D$  -  $T_a$

**SMini6-F3-B**

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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