

RT3K66M

Composite Transistor
For high speed switching
Silicon N-channel MOSFET

DESCRIPTION

RT3K66M is a composite transistor built with two INK0012AX chips in SC-88 package.

FEATURE

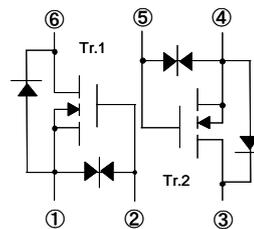
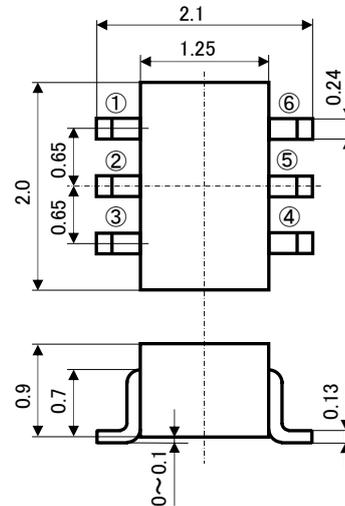
- Input impedance is high, and not necessary to consider a drive electric current.
- Drive voltage 4V
- Low on Resistance.
 $R_{DS(ON)}=1.7\ \Omega$ (TYP) @ $I_D=100\text{mA}$, $V_{GS}=4.0\text{V}$
 $R_{DS(ON)}=1.0\ \Omega$ (TYP) @ $I_D=100\text{mA}$, $V_{GS}=10\text{V}$
- High speed switching.
- Small package for easy mounting.

APPLICATION

High speed switching , Analog switching

OUTLINE DRAWING

Unit: mm



TERMINAL CONNECTOR

- ①: SOURCE1
- ②: GATE1
- ③: DRAIN2
- ④: SOURCE2
- ⑤: GATE2
- ⑥: DRAIN1

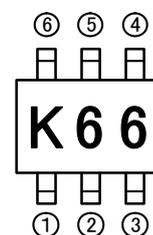
JEITA: SC-88

MAXIMUM RATING (Ta=25°C) (Tr1,Tr2 Common)

SYMBOL	PARAMETER	RATING	UNIT
V _{DSS}	Drain-source voltage	30	V
V _{GS}	Gate-source voltage	±20	V
I _D	Drain current(DC)	200	mA
I _{DP}	Drain current(Pulse)	400(※1)	mA
P _D	Total power dissipation	150	mW
T _{ch}	Channel temperature	+150	°C
T _{stg}	Range of Storage temperature	-55 ~ +150	°C

※1: Pw ≤ 10μs, Duty cycle ≤ 1%

MARKING



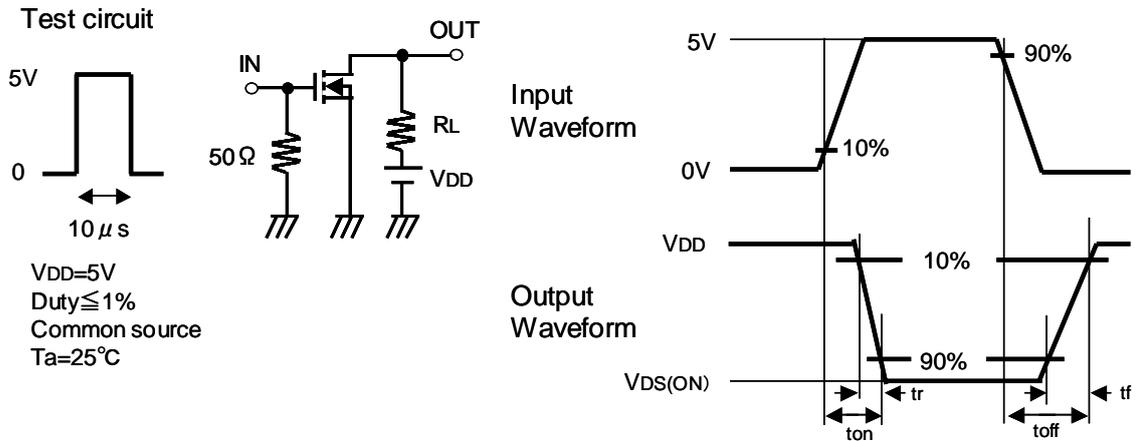
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ELECTRICAL CHARACTERISTICS (Ta=25°C) (Tr1,Tr2 Common)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V(BR)DSS	Drain-source breakdown voltage	Id=100μA, VGS=0V	30	-	-	V
IGSS	Gate-source leak current	VGS=±15V, VDS=0V	-	-	±1.0	μA
IDSS	Zero gate voltage drain current	VDS=30V, VGS=0V	-	-	1.0	μA
Vth	Gate threshold voltage	Id=250μA, VDS=VGS	1.0	-	2.0	V
Yfs	Forward transfer admittance	VDS=10V, ID=100mA	-	245	-	mS
RDS(ON)	Static drain-source on-state resistance	Id=100mA, VGS=4.0V	-	1.7	-	Ω
		Id=100mA, VGS=10.0V	-	1.0	-	
Ciss	Input capacitance	VDS=10V, VGS=0V, f=1MHz	-	23	-	pF
Coss	Output capacitance		-	7.0	-	
ton	Switching time	VDD=5V, ID=10mA VGS=0~5V	-	30	-	ns
toff			-	66	-	

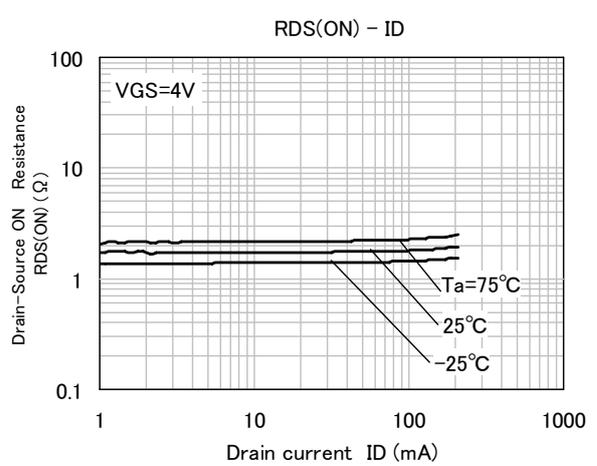
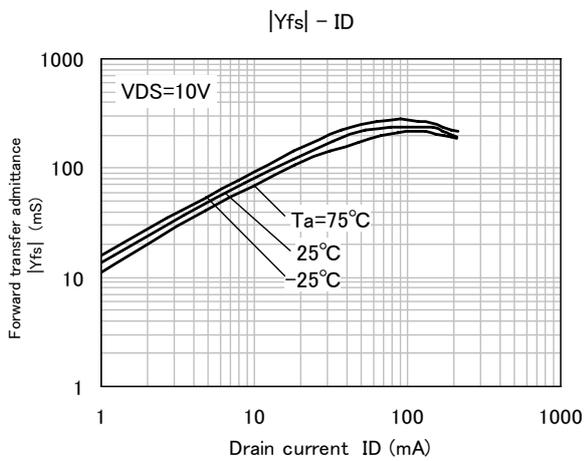
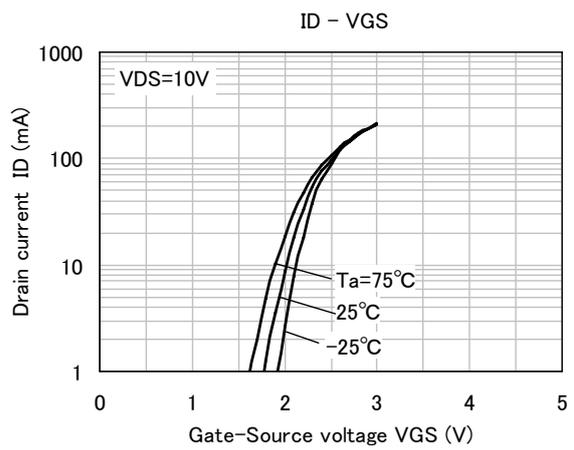
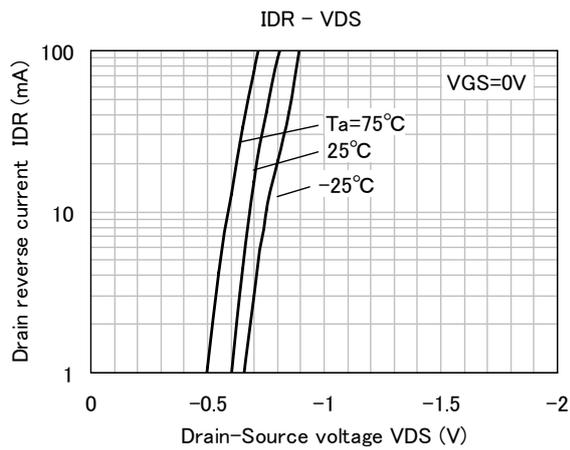
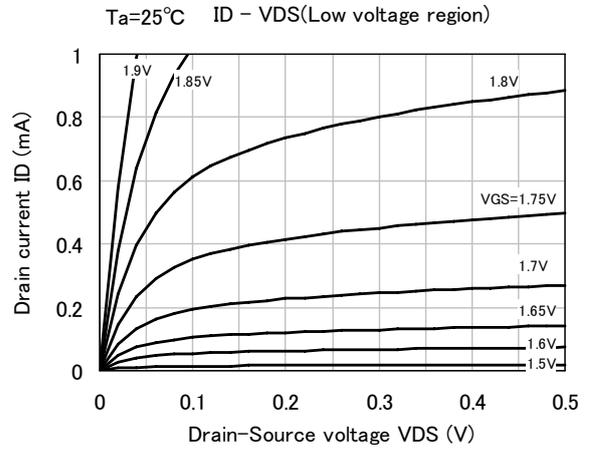
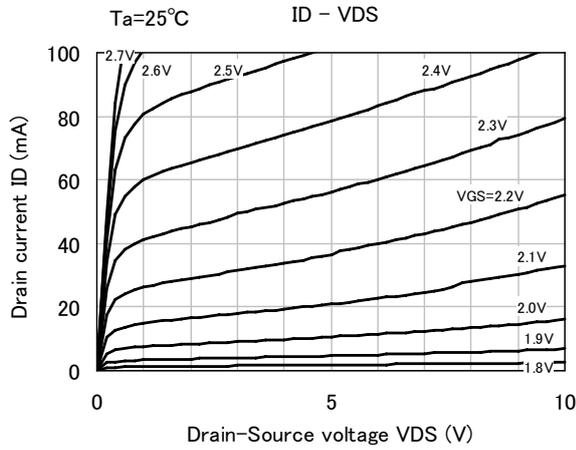
Switching time test condition



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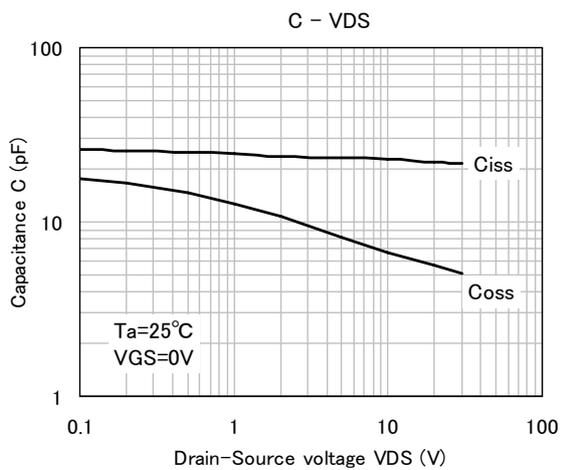
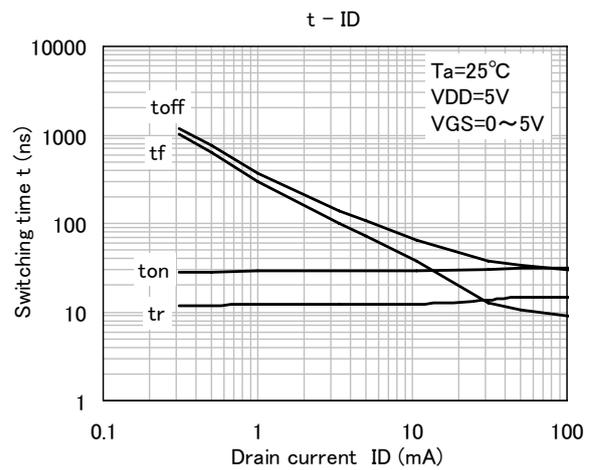
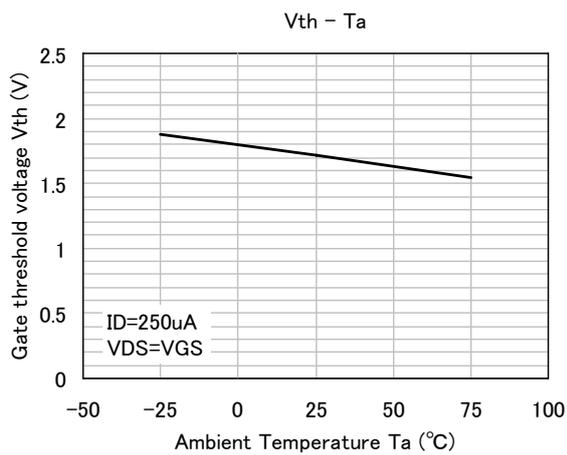
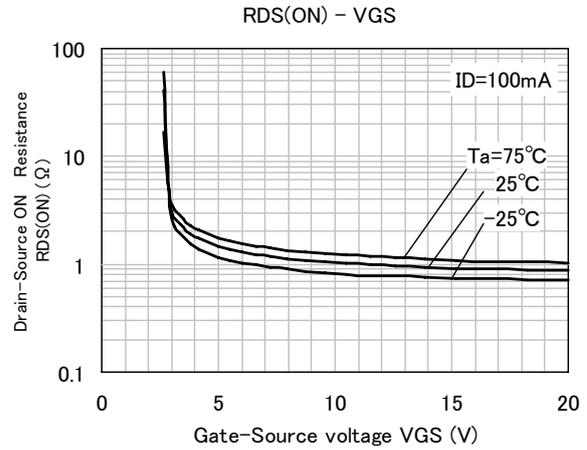
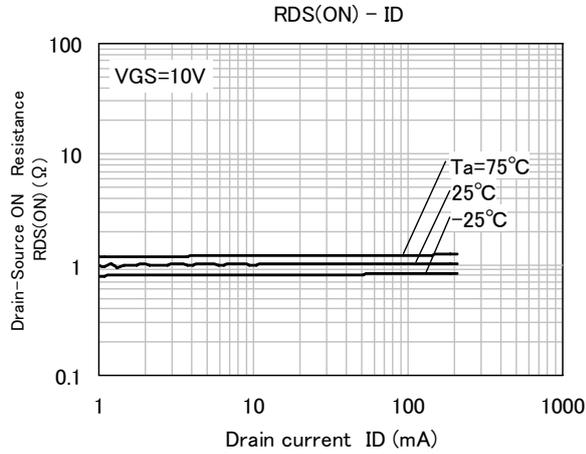
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TYPICAL CHARACTERISTICS(Tr1,Tr2 Common)



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