

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.

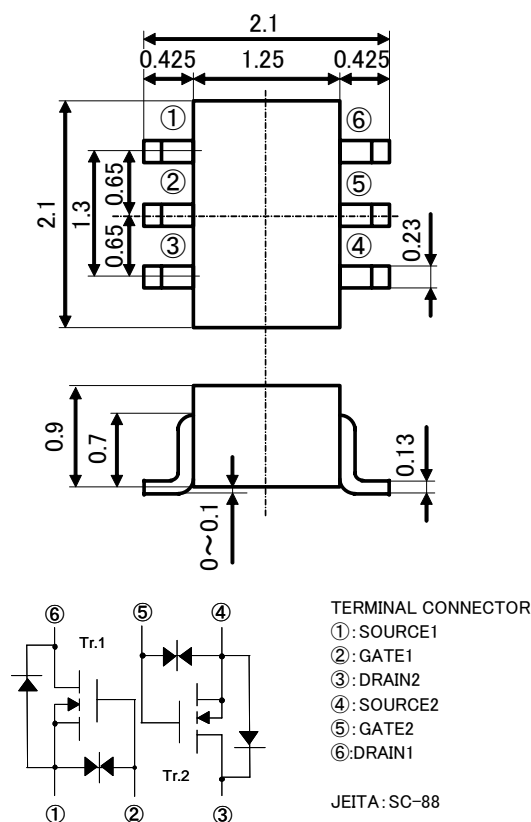
- Small package for easy mounting.

APPLICATION

High speed switching , Analog switching

OUTLINE DRAWING

Unit:mm

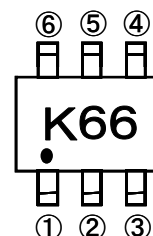


MAXIMUM RATING ($T_a=25^\circ\text{C}$) ($\text{Tr}1, \text{Tr}2$ Common)

SYMBOL	PARAMETER	RATING	UNIT
V_{DSS}	Drain-source voltage	30	V
V_{GSS}	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	$^\circ\text{C}$
T_{stg}	Range of Storage temperature	-55~+150	$^\circ\text{C}$

※1: $P_w \leq 10\mu\text{s}$, Duty cycle $\leq 1\%$

MARKING



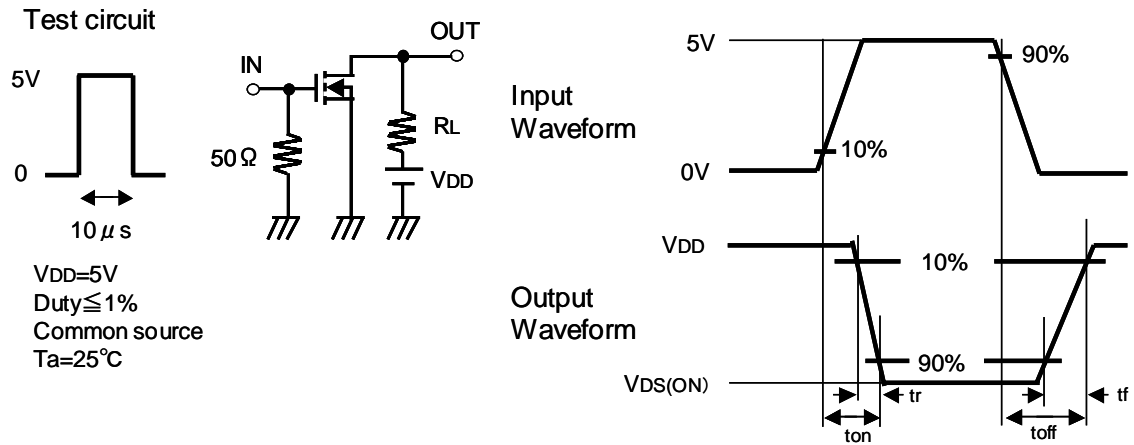
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ELECTRICAL CHARACTERISTICS (Ta=25°C) (Tr1,Tr2 Common)

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	–	

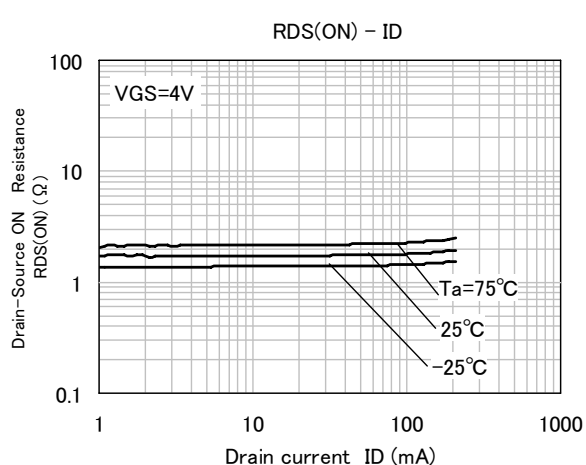
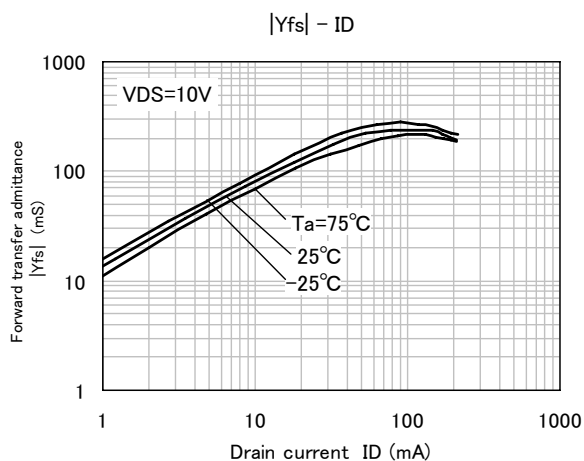
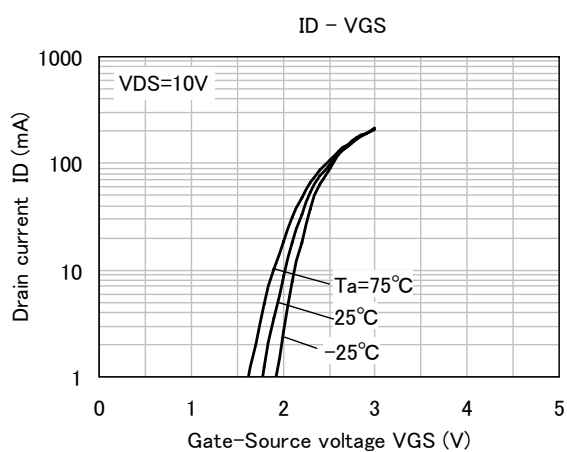
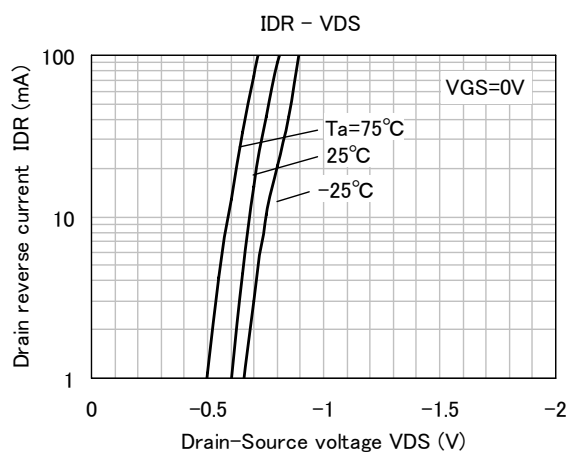
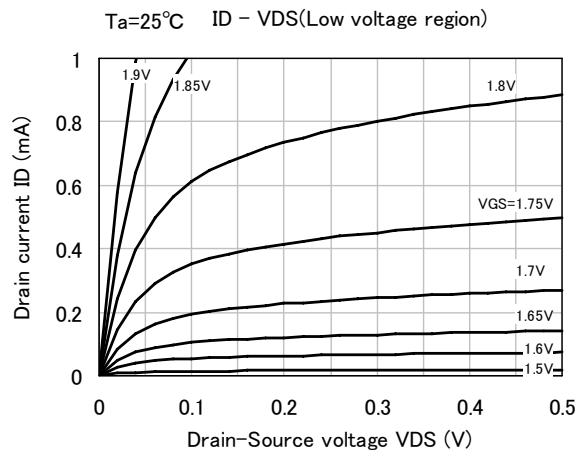
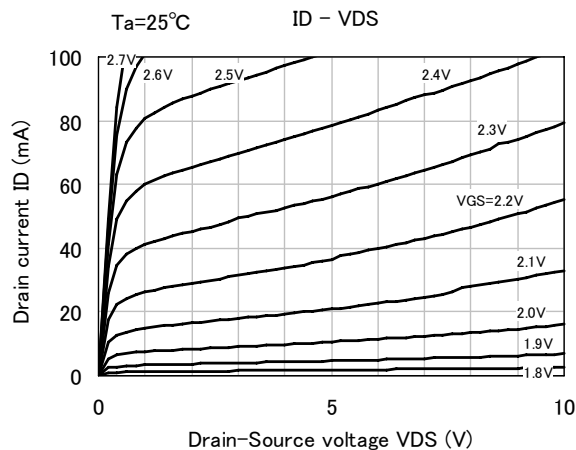
Switching time test condition



RT3K66M

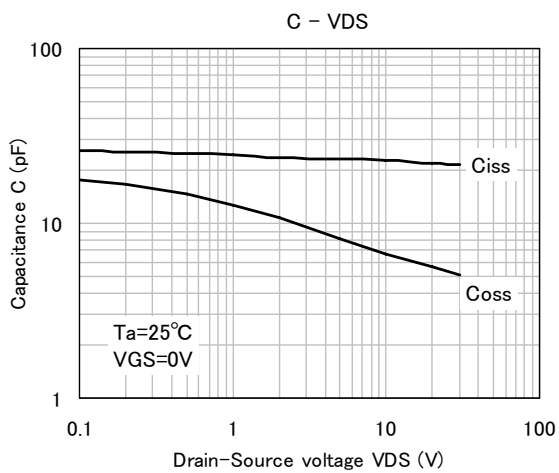
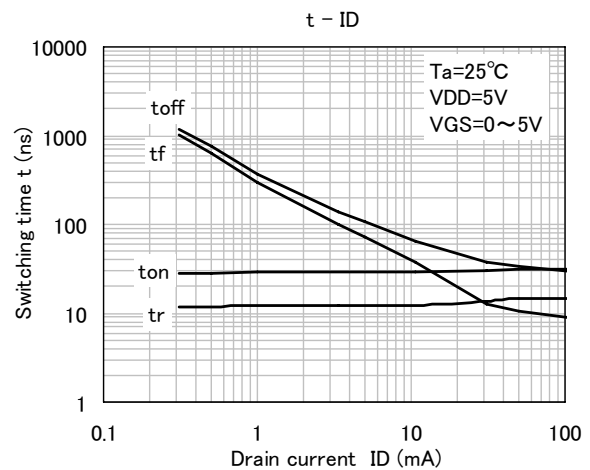
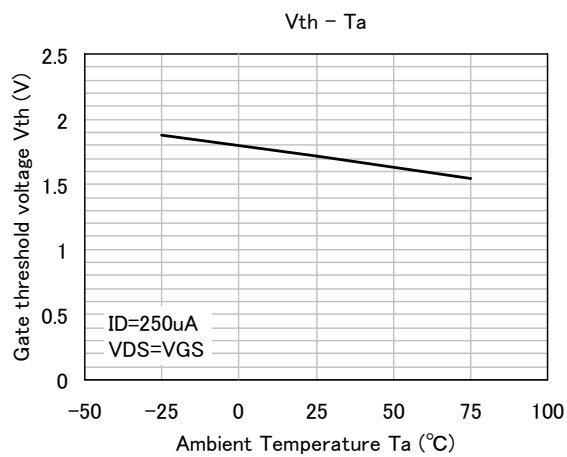
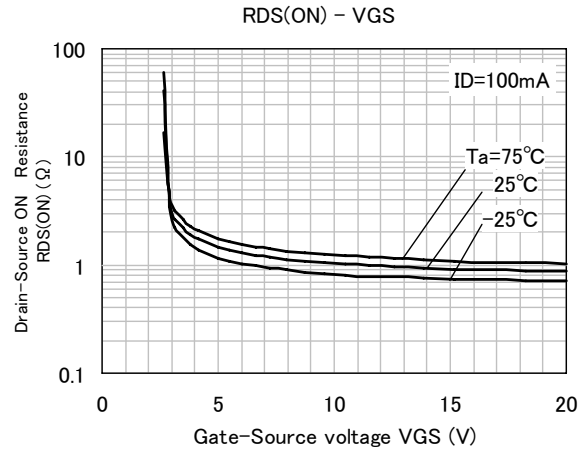
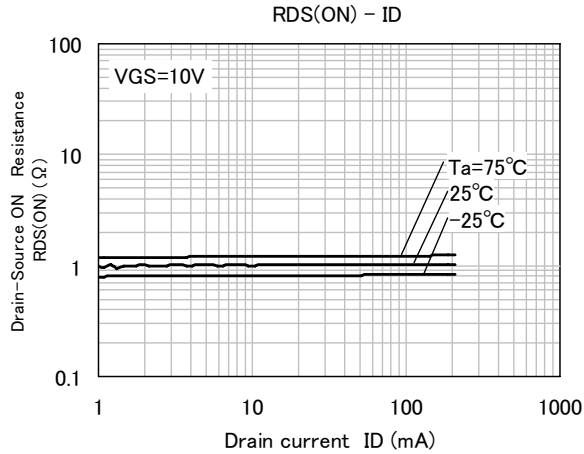
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TYPICAL CHARACTERISTICS(Tr1,Tr2 Common)



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