

RT3K33M

Composite Transistor
For high speed switching
Silicon N-channel MOSFET

DESCRIPTION

RT3K33M is a composite transistor built with two INK0003AX chips in SC-88 package.

FEATURE

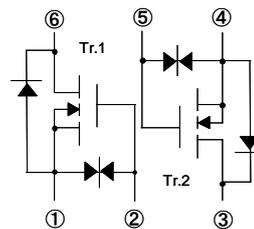
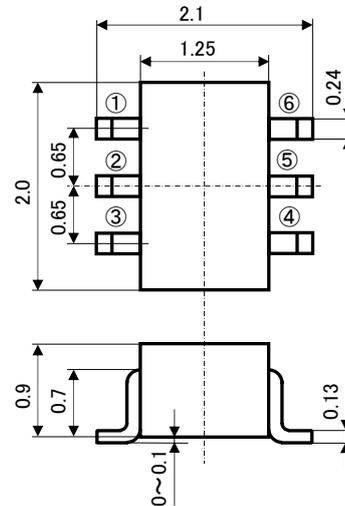
- Input impedance is high, and not necessary to consider a drive electric current.
- Drive voltage 2.5V
- Low on Resistance. $R_{ON}=0.9\Omega$ (TYP)
- High speed switching.
- Small package for easy mounting.

APPLICATION

High speed switching , Analog switching

OUTLINE DRAWING

Unit: mm



TERMINAL CONNECTOR

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

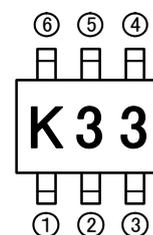
JEITA: SC-88

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

SYMBOL	PARAMETER	RATING	UNIT
V _{DSS}	Drain-source voltage	20	V
V _{GS}	Gate-source voltage	±8	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



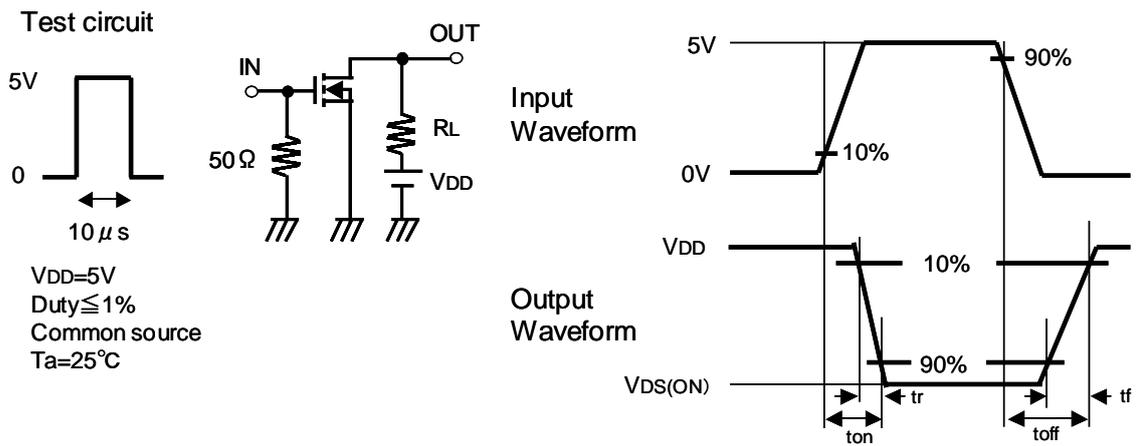
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ELECTRICAL CHARACTERISTICS (Ta=25°C) (Tr1,Tr2 Common)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V(BR)DSS	Drain-source breakdown voltage	ID=100μA, VGS=0V	20	-	-	V
IGSS	Gate-source leak current	VGS=±5V, VDS=0V	-	-	±0.5	μA
IDSS	Zero gate voltage drain current	VDS=20V, VGS=0V	-	-	1.0	μA
Vth	Gate threshold voltage	ID=250μA, VDS=VGS	0.6	-	1.2	V
Yfs	Forward transfer admittance	VDS=10V, ID=0.1A	-	300	-	mS
RDS(ON)	Static drain-source on-state resistance	ID=100mA, VGS=4.0V	-	0.9	-	Ω
Ciss	Input capacitance	VDS=10V, VGS=0V, f=1MHz	-	34	-	pF
Coss	Output capacitance		-	8.5	-	
ton	Switching time	VDD=5V, ID=10mA VGS=0~5V	-	14	-	ns
toff			-	85	-	

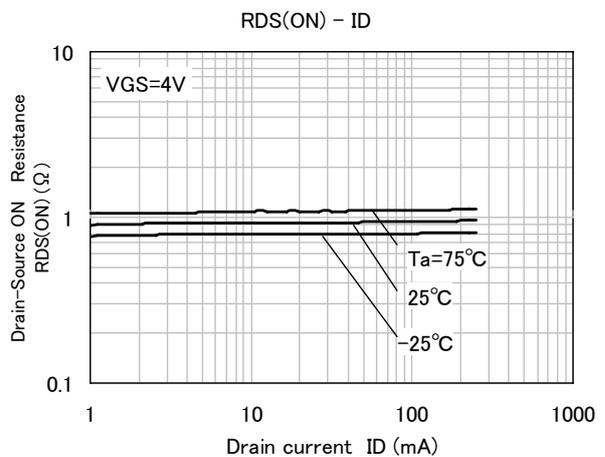
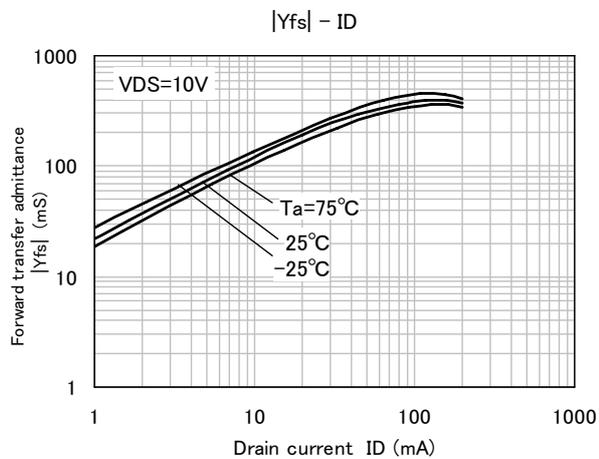
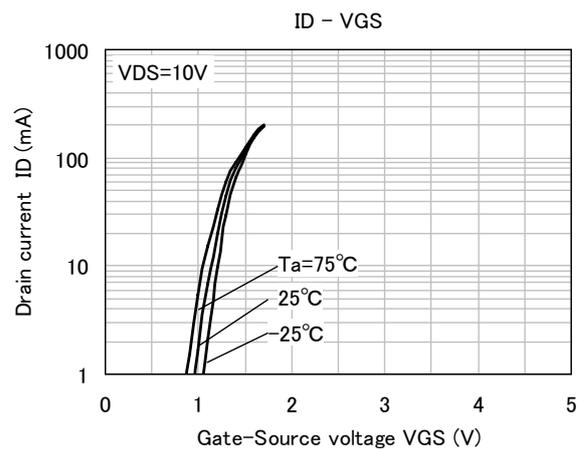
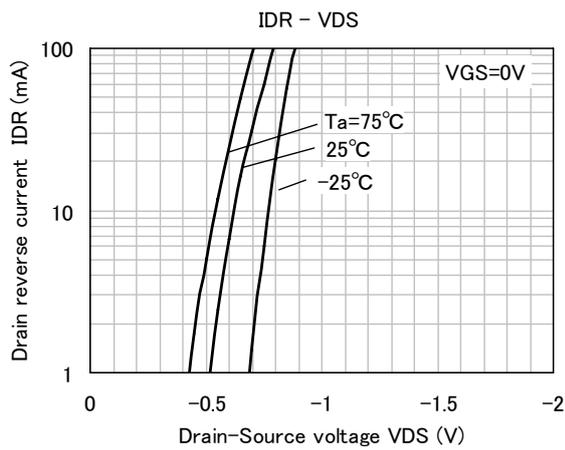
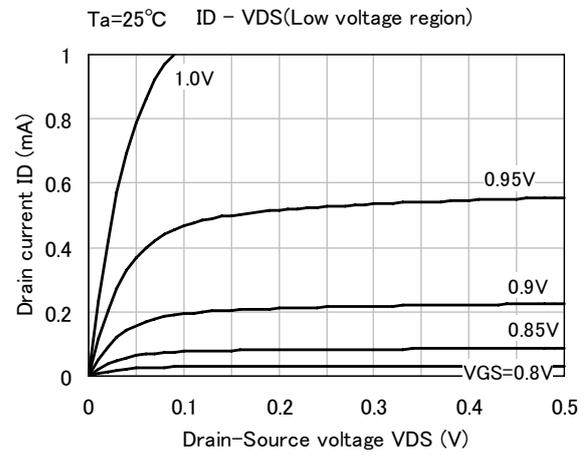
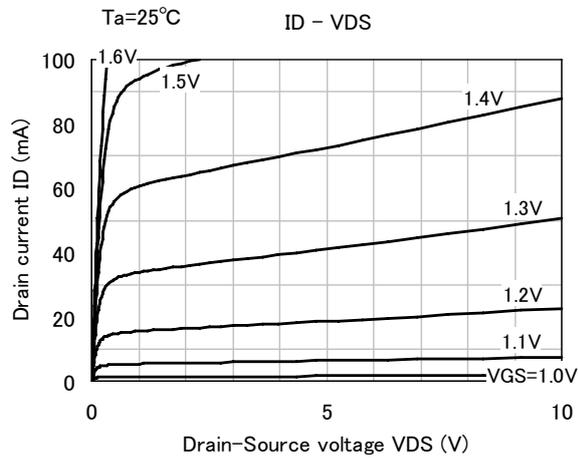
Switching time test condition



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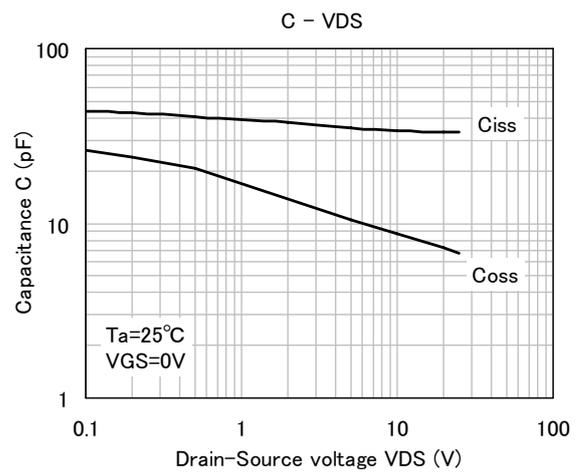
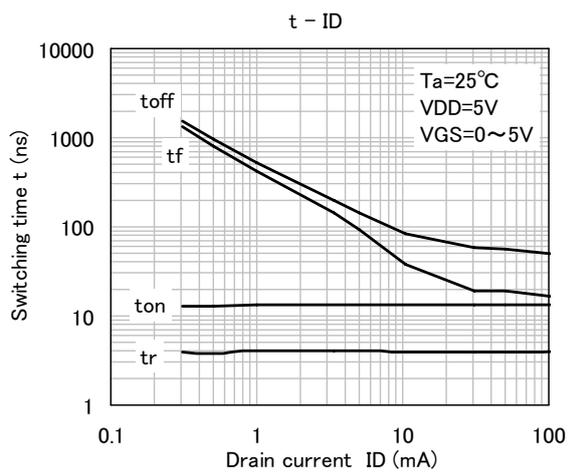
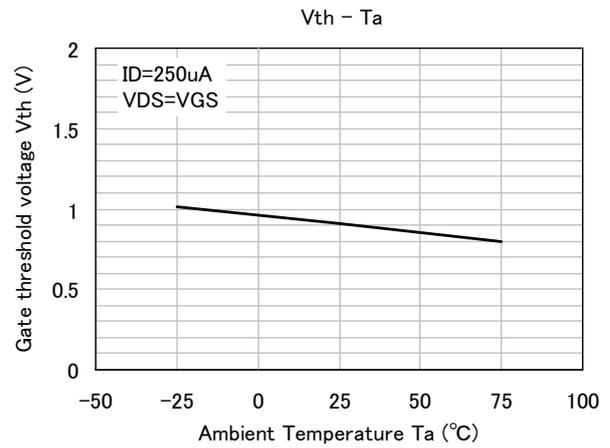
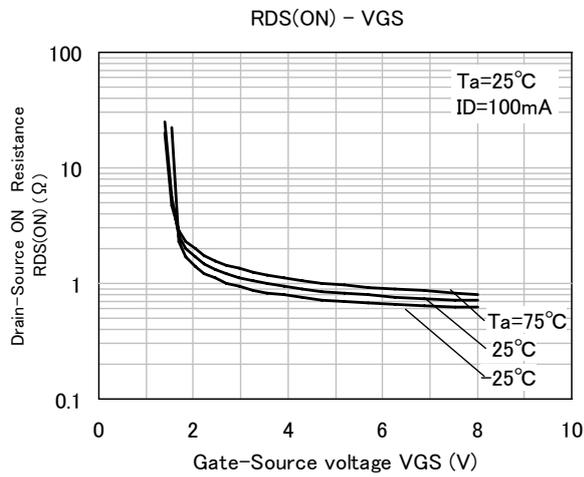
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TYPICAL CHARACTERISTICS(Tr1,Tr2 Common)



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