RT3K22M

Composite Transistor
For high speed switching
Silicon N-channel MOSFET

DESCRIPTION

RT3K22M is a composite transistor built with two INK0002AX chips in SC-88 package.

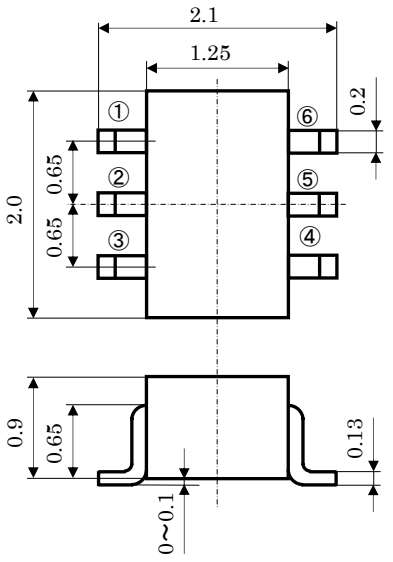
FEATURE

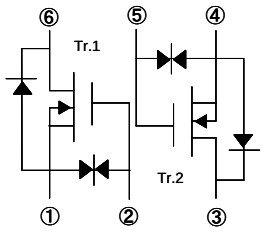
・Input impedance is high, and not necessary to consider a drive electric current.
・Vth is low, and drive by low voltage is possible. Vth=0.6～1.2V
・Low on Resistance. Ron=1.1Ω(TYP)
・High speed switching.
・Small package for easy mounting.

APPLICATION

high speed switching , Analog switching

OUTLINE DRAWING Unit:mm





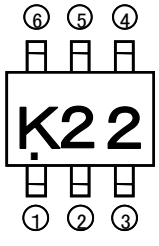
TERMINAL CONNECTOR
①:SOURCE1
②:GATE1
③:DRAIN2
④:SOURCE2
⑤:GATE2
⑥:DRAIN1

JEITA:SC-88

MAXIMUM RATING (Ta=25℃)

SYMBOL	PARAMETER	RATING	UNIT
V_{DSS}	Drain-source voltage	30	V
V_{GSS}	Gate-source voltage	±8	V
I_D	Drain current	200	mA
P_D	Total power dissipation(Ta=25℃)	150	mW
T_{ch}	Channel temperature	+125	℃
T_{stg}	Range of Storage temperature	-55～+125	℃

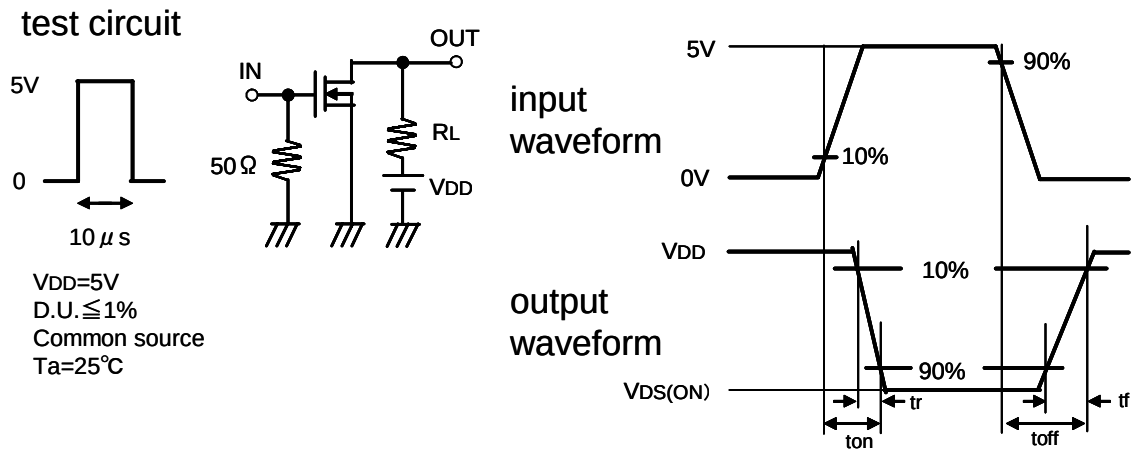
MARKING



ELECTRICAL CHARACTERISTICS (Ta=25℃)

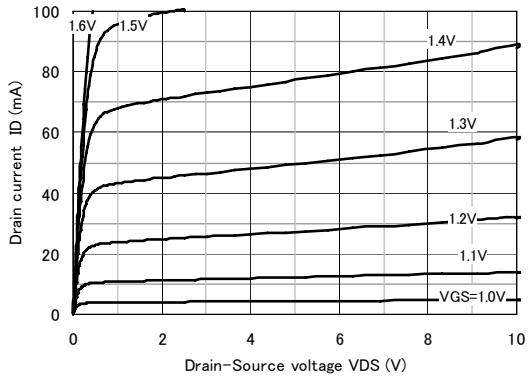
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)DSS}$	Drain-source breakdown voltage	I_D=100μA, V_{GS}=0V	30	–	–	V
I_{GSS}	Gate-source leak current	V_{GS}=±5V, V_{DS}=0V	–	–	±0.5	μA
I_{DSS}	Zero gate voltage drain current	V_{DS}=30V ,V_{GS}=0V	–	–	50	μA
V_{th}	Gate threshold voltage	I_D=250μA, V_{DS}= V_{GS}	0.6	–	1.2	V
$\lvert Y_{fs} \rvert$	Forward transfer admittance	V_{DS}=10V, I_D=0.1A	–	300	–	mS
$R_{DS(ON)}$	Static drain-source on-state resistance	I_D=100mA, V_{GS}=4.0V	–	1.1	–	Ω
C_{iss}	Input capacitance	V_{DS}=10V, V_{GS}=0V,f=1MHz	–	33	–	pF
C_{oss}	Output capacitance	V_{DS}=10V, V_{GS}=0V,f=1MHz	–	6.8	–	pF
t_{ON}	Switching time	V_{DD}=5V , I_D=10mA V_{GS}=0～5V	–	12	–	ns
t_{OFF}			–	80	–	

Switching time test condition

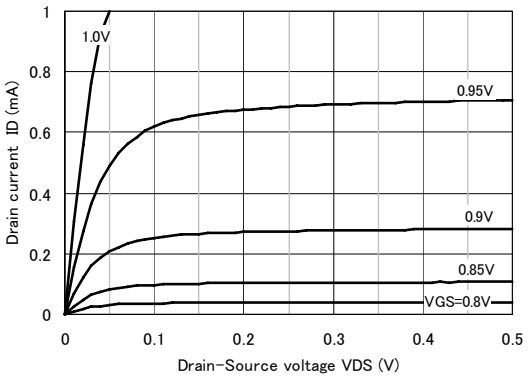


TYPICAL CHARACTERISTICS

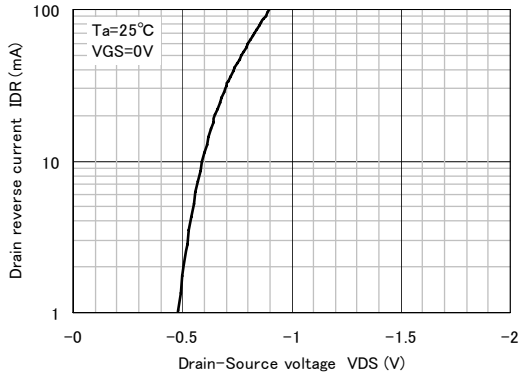
Ta=25℃ ID -VDS



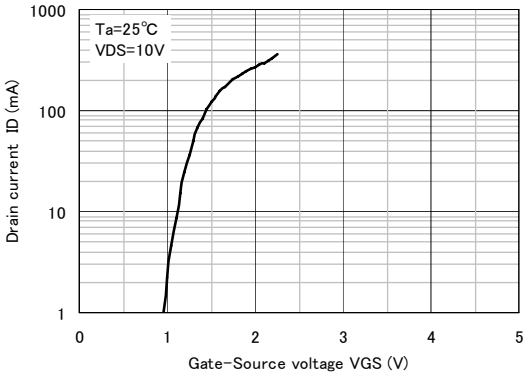
Ta=25℃ ID -VDS(Low voltage region)



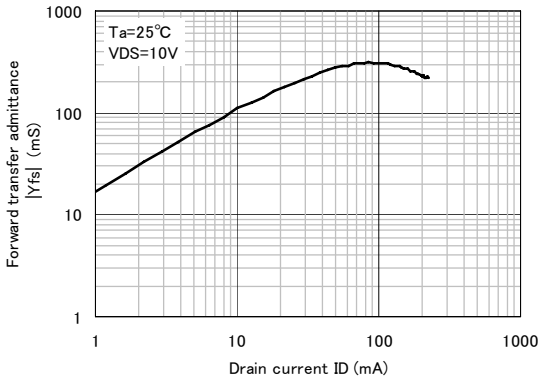
IDR -VDS



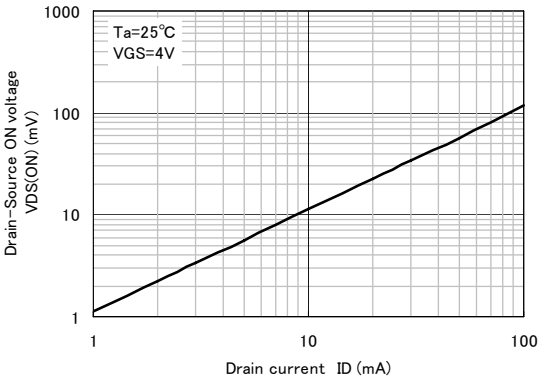
ID -VGS



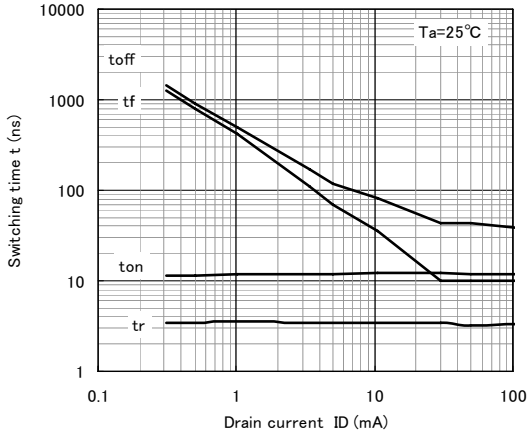
|Yfs| - ID



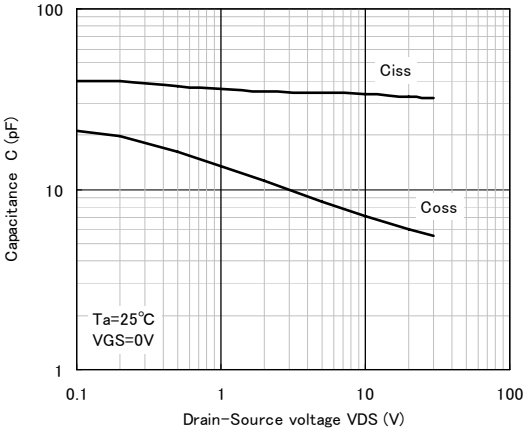
VDS(ON) -ID



t - ID



C - VDS



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