

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.

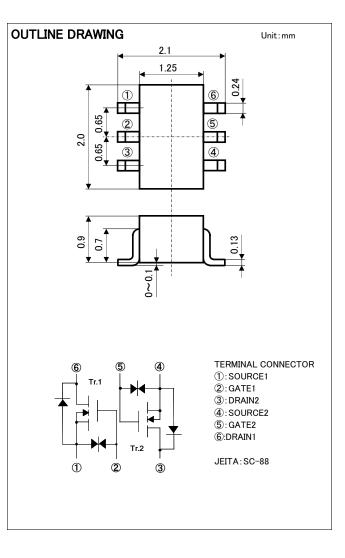
FEATURE

 $\mbox{\cdot} Input$ impedance is high, and not necessary to consider a drive

- electric current.
- Drive voltage 2.5V
- ·Low on Resistance. RON=1.1 $\Omega\left(\mbox{TYP}\right)$
- ·High speed switching.
- •Small package for easy mounting.

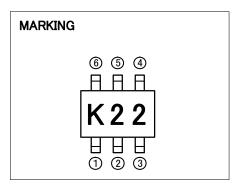
APPLICATION

High speed switching , Analog switching



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

SYMBOL	PARAMETER	RATING	UNIT
VDSS	Drain-source voltage	30	V
Vgss	Gate-source voltage	±8	V
ID	Drain current(DC)	200	mA
IDP	Drain current(Pulse)	400(※1)	mA
PD	Total power dissipation	150	mW
Tch	Channel temperature	+150	°C
Tstg	Range of Storage temperature	$-55 \sim +150$	S



 $1: Pw \leq 10 \mu s$, Duty cycle $\leq 1\%$

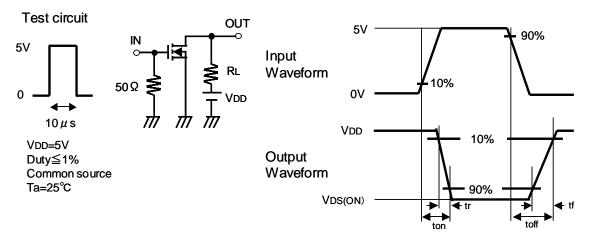
RT3K22M

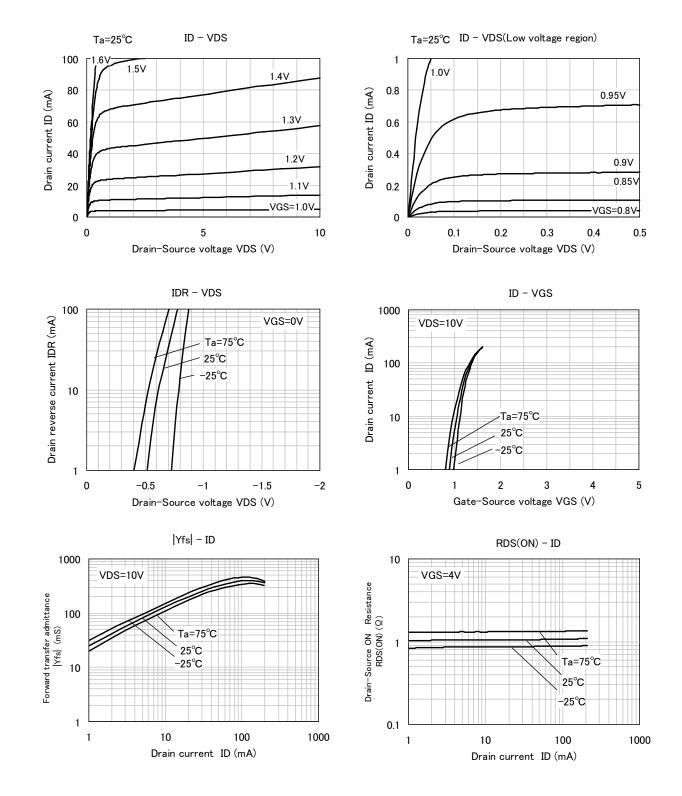
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ELECTRICAL CHARACTERISTICS (Ta=25°C) (Tr1,Tr2 Common)

Symbol	Parameter	Test conditions	Limits			
			Min	Тур	Max	Unit
V(BR)DSS	Drain-source breakdown voltage	ID=100µA, VGS=0V	30	-	-	V
Igss	Gate-source leak current	$V_{GS}=\pm 5V, V_{DS}=0V$	-	-	±0.5	μA
Idss	Zero gate voltage drain current	Vds=30V, 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	-	1.1	-	Ω
Ciss	Input capacitance		-	33	-	pF
Coss	Output capacitance	VDS=10V, VGS=0V, f=1MHz	_	6.8	_	
ton	- Switching time	Vdd=5V, Id=10mA Vgs=0~5V	-	12	-	ns
toff			-	80	-	

Switching time test condition



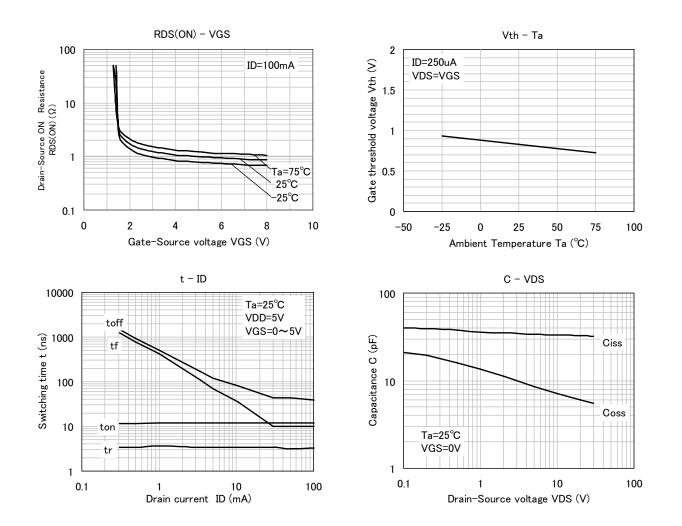


TYPICAL CHARACTERISTICS(Tr1,Tr2 Common)

ISAHAYA ELECTRONICS CORPORATION

RT3K22M

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ISAHAYA ELECTRONICS CORPORATION

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