

RT3J55M

Composite Transistor
For high speed switching
Silicon P-channel MOSFET

DESCRIPTION

RT3J55M is a composite transistor built with two INJ0011AX chips in SC-88 package.

FEATURE

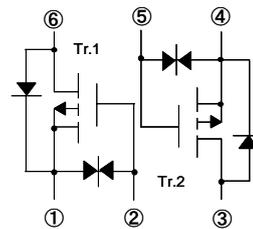
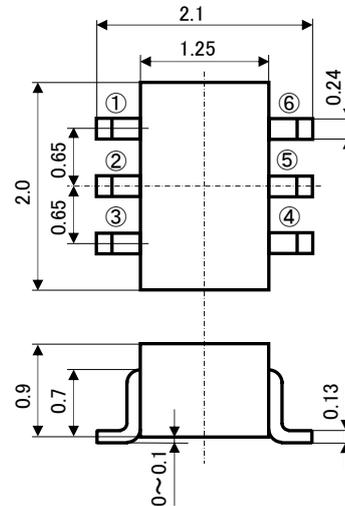
- Input impedance is high, and not necessary to consider a drive electric current.
- Drive voltage -4V
- Low on Resistance.
 $R_{DS(ON)}=7.0\ \Omega$ (TYP) @ $I_D=-100\text{mA}$, $V_{GS}=-4.0\text{V}$
 $R_{DS(ON)}=4.8\ \Omega$ (TYP) @ $I_D=-100\text{mA}$, $V_{GS}=-10\text{V}$
- High speed switching.
- 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

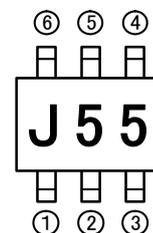
JEITA: SC-88

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

SYMBOL	PARAMETER	RATING	UNIT
V _{DSS}	Drain-source voltage	-50	V
V _{GS}	Gate-source voltage	±20	V
I _D	Drain current(DC)	-100	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



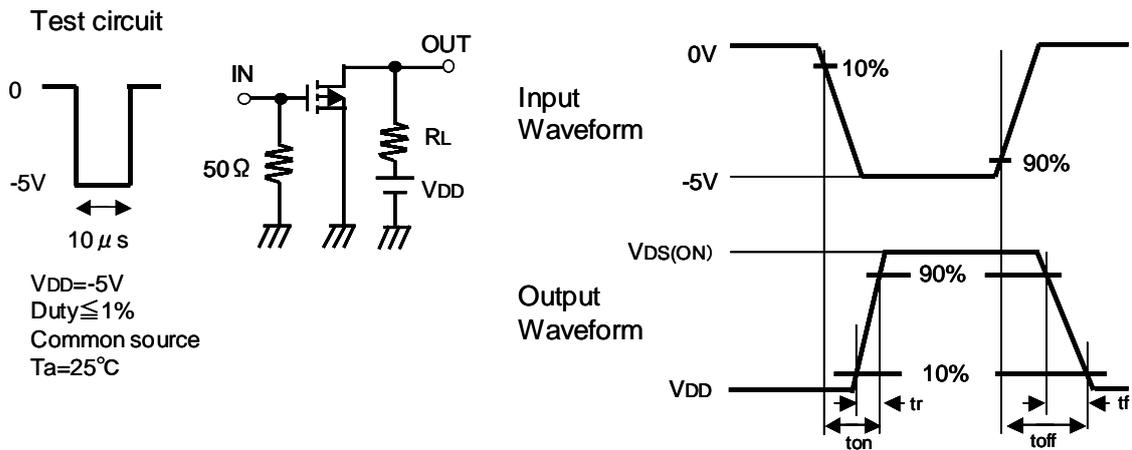
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ELECTRICAL CHARACTERISTICS (Ta=25°C) (Tr1,Tr2 Common)

SYMBOL	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V(BR)DSS	Drain-source breakdown voltage	$I_D = -100\mu A, V_{GS} = 0V$	-50	-	-	V
I _{GSS}	Gate-source leak current	$V_{GS} = \pm 20V, V_{DS} = 0V$	-	-	± 10	μA
I _{DSS}	Zero gate voltage drain current	$V_{DS} = -50V, V_{GS} = 0V$	-	-	-1.0	μA
V _{th}	Gate threshold voltage	$I_D = -250\mu A, V_{DS} = V_{GS}$	-1.0	-	-2.0	V
Y _{fs}	Forward transfer admittance	$V_{DS} = -10V, I_D = -100mA$	-	145	-	mS
R _{DS(ON)}	Static drain-source on-state resistance	$I_D = -100mA, V_{GS} = -4.0V$	-	7.0	-	Ω
		$I_D = -100mA, V_{GS} = -10V$	-	4.8	-	
C _{iss}	Input capacitance	$V_{DS} = -10V, V_{GS} = 0V, f = 1MHz$	-	25	-	pF
C _{oss}	Output capacitance		-	6.0	-	pF
t _{on}	Switching time	$V_{DD} = -5V, I_D = -10mA$ $V_{GS} = 0 \sim -5V$	-	35	-	ns
t _{off}			-	90	-	

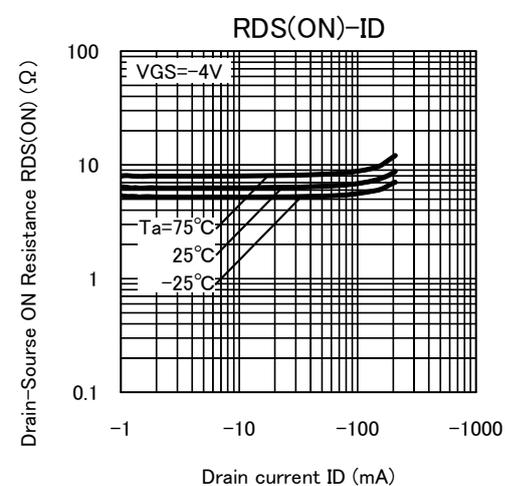
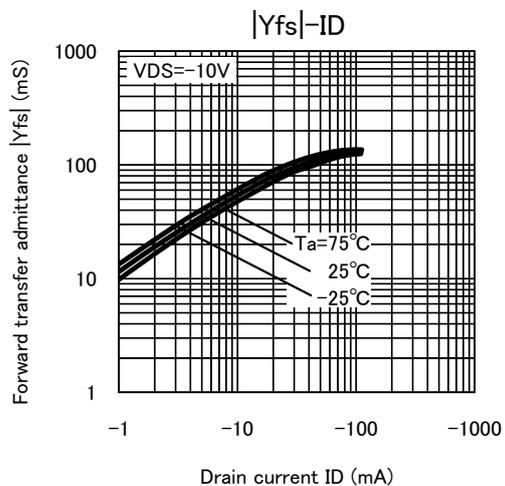
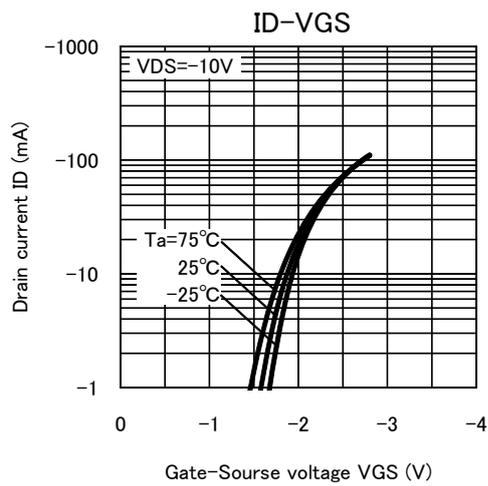
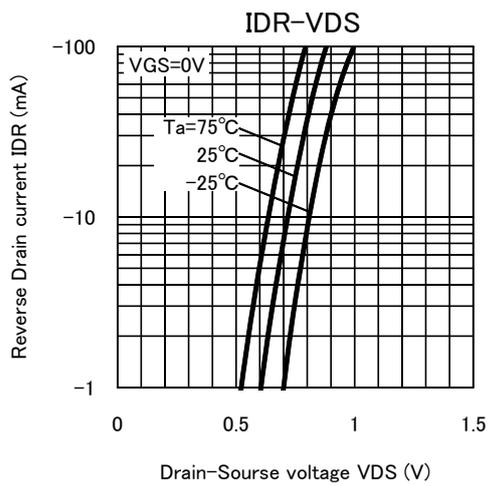
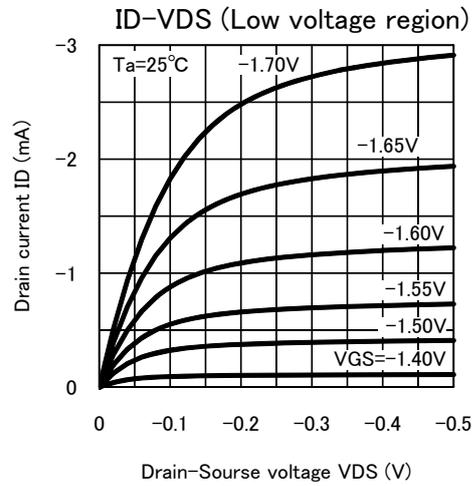
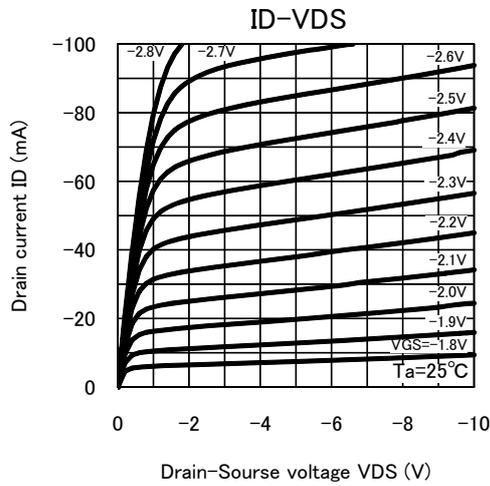
Switching time test condition



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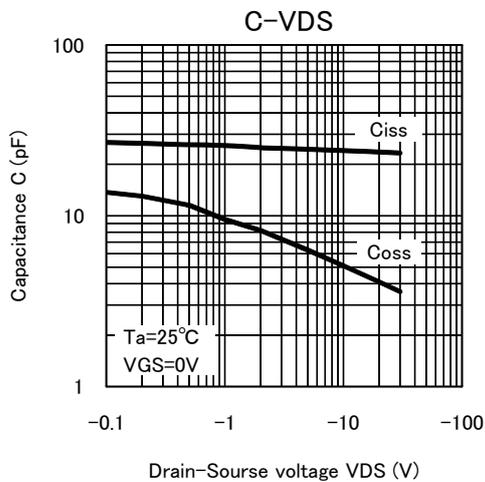
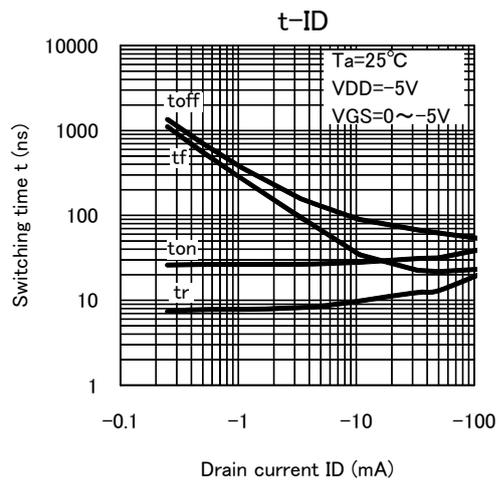
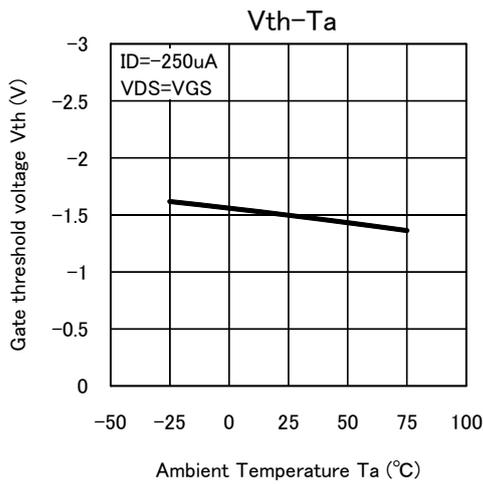
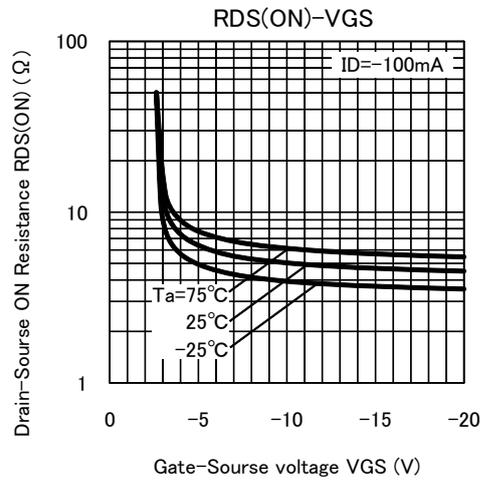
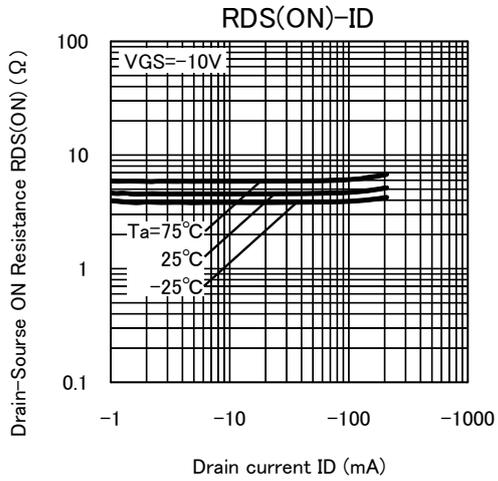
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TYPICAL CHARACTERISTICS(Tr1,Tr2 Common)



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