PRELIMINARY

RT3J11M

Composite Transistor For high speed switching Silicon P-channel MOSFET

DESCRIPTION

RT3J11M is a composite transistor built with two INJ0001AX chips in SC-88 package.

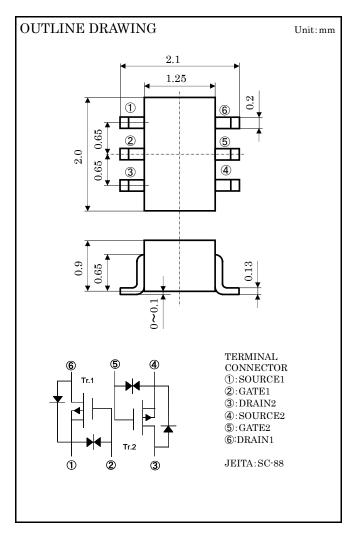
FEATURE

•Input impedance is high, and not necessary to consider a drive electric current.

- •Vth is low, and drive by low voltage is possible. Vth= $0.6 \sim 1.2 V$
- •Low on Resistance. Ron= $7\Omega(TYP)$
- •High speed switching.
- •Small package for easy mounting.

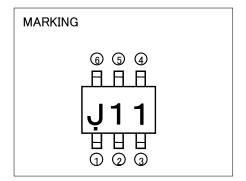
APPLICATION

high speed switching , Analog switching



MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING	UNIT
V _{DSS}	Drain-source voltage	-50	V
VGSS	Gate-source voltage	±8	V
ID	Drain current	-100	mA
PD	Total power dissipation(Ta=25°C)	150	mW
T_{ch}	Channel temperature	+125	°C
$\mathrm{T}_{\mathrm{stg}}$	Range of Storage temperature	-55~+125	°C



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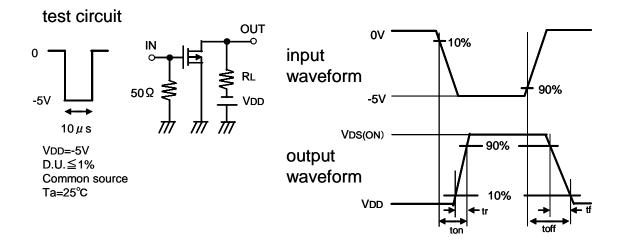
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Composite Transistor For high speed switching Silicon P-channel MOSFET

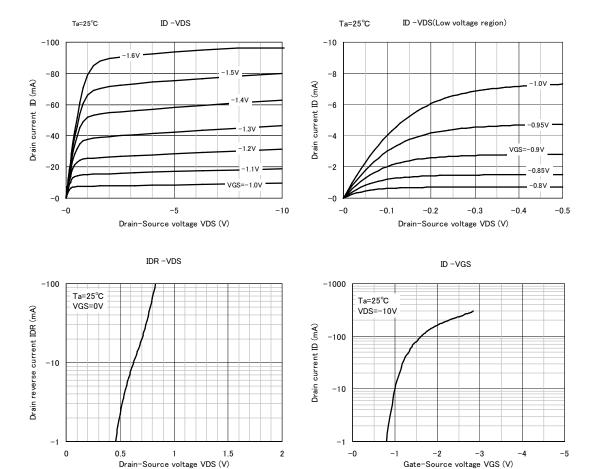
ELECTRICAL CHARACTERISTICS (Ta=25°C)

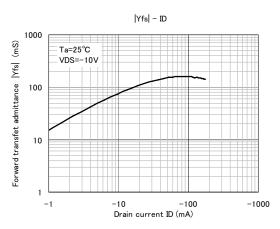
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Тур	Max	Unit
V(BR)DSS	Drain-source breakdown voltage	I _D =-100 μ A, V _{GS} =0V	-50	-	-	V
Igss	Gate-source leak current	$V_{GS} = \pm 5V, V_{DS} = 0V$	-	-	±0.5	μA
Idss	Zero gate voltage drain current	V _{DS} =-50V ,V _{GS} =0V	-	-	-50	μA
V_{th}	Gate threshold voltage	$I_{D} = -250 \mu$ A, V _{DS} = V _{GS}	-0.6	-	-1.2	V
Y _{fs}	Forward transfer admittance	V _{DS} =-10V, I _D =-0.1A	-	220	-	mS
Rds(on)	Static drain-source on-state resistance	I _D =-100mA, V _{GS} =-4.0V	-	7	_	Ω
Ciss	Input capacitance	V _{DS} =-10V, V _{GS} =0V,f=1MHz	-	28	-	pF
Coss	Output capacitance	V _{DS} =-10V, V _{GS} =0V,f=1MHz	-	5.2	_	pF
ton	- Switching time	V _{DD} =-5V , I _D =-10mA	-	13	-	
toff		V _{GS} =0∼−5V	-	135	-	ns

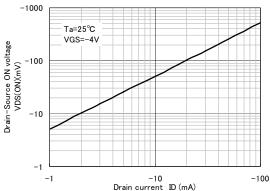
Switching time test condition



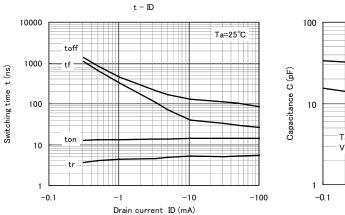
TYPICAL CHARACTERISTICS



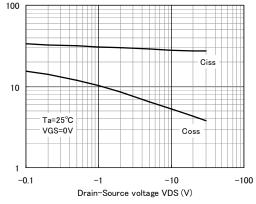




VDS(ON) - ID







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