

INJ0002AX SERIES

•PRELIMINARY

Notice: This is not a final specification
Some parametric are subject to change.

High speed switching
Silicon P-channel MOSFET

DESCRIPTION

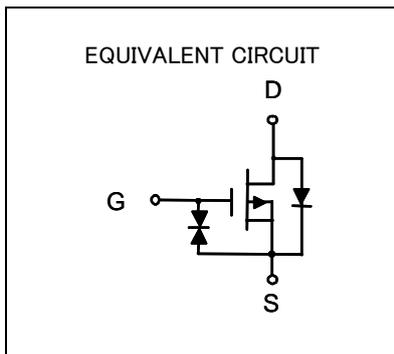
INJ0002AX is a Silicon P-channel MOSFET.
This product is most suitable for low voltage use such as portable machinery, because of low voltage drive and low on resistance.

FEATURE

- Input impedance is high, and not necessary to consider a drive electric current.
- V_{th} is low, and drive by low voltage is possible.
 $V_{th} = -0.6 \sim -1.2V$
- Low on Resistance. $R_{on} = 3\Omega$ (TYP)
- High speed switching.
- Small package for easy mounting.

APPLICATION

high speed switching, Analog switching



OUTLINE DRAWING

Unit: mm

INJ0002AT2	INJ0002AM1
<p>JEITA, JEDEC: — ISAHAYA: T-USM</p> <p>TERMINAL CONNECTOR ①: GATE ②: SOURCE ③: DRAIN</p>	<p>JEITA: SC-70 JEDEC: —</p> <p>TERMINAL CONNECTOR ①: GATE ②: SOURCE ③: DRAIN</p>
<p>JEITA: SC-75A JEDEC: —</p> <p>TERMINAL CONNECTOR ①: GATE ②: SOURCE ③: DRAIN</p>	<p>JEITA: SC-59 JEDEC: Similar to TO-236</p> <p>T TERMINAL CONNECTOR ①: GATE ②: SOURCE ③: DRAIN</p>

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MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING				UNIT
		INJ0002AT2	INJ0002AU1	INJ0002AM1	INJ0002AC1	
V _{DSS}	Drain-source voltage	-30				V
V _{GSS}	Gate-source voltage	±8				V
I _D	Drain current	-200				mA
P _C	Total power dissipation (Ta=25°C)	125(※)	150	200		mW
T _{ch}	Channel temperature	+125	+150			°C
T _{stg}	Range of Storage temperature	-55~+125	-55~+150			°C

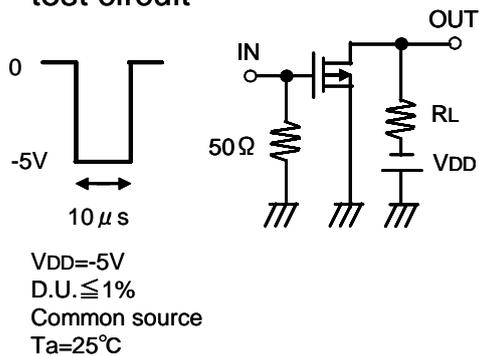
ELECTRICAL CHARACTERISTICS (Ta=25°C)

※package mounted on 9mm × 19mm × 1mm glass-epoxy substrate.

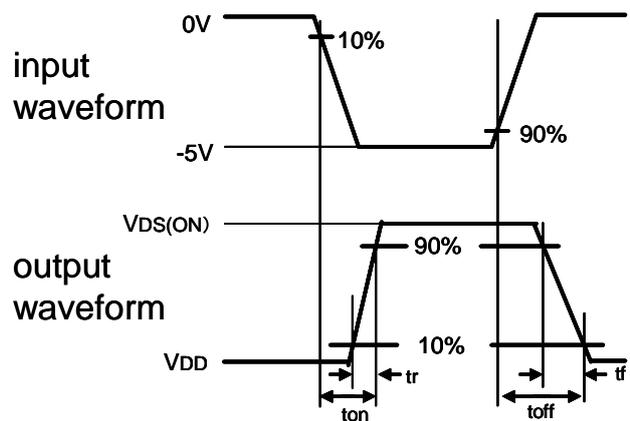
SYMBOL	PARAMETER	TEST CONDITION	LIMIT			UNIT
			MIN	TYP	MAX	
V _{(BR)DSS}	Drain-source breakdown voltage	I _D = -100 μA, V _{GS} = 0V	-30	-	-	V
I _{GSS}	Gate-source leak current	V _{GS} = ±5V, V _{DS} = 0V	-	-	±0.5	μA
I _{DSS}	Zero gate voltage drain current	V _{DS} = -30V, V _{GS} = 0V	-	-	-50	μA
V _{th}	Gate threshold voltage	I _D = -250 μA, V _{DS} = V _{GS}	-0.6	-	-1.2	V
Y _{fs}	Forward transfer admittance	V _{DS} = -10V, I _D = -0.1A	-	220	-	mS
R _{DS(ON)}	Static drain-source on-state resistance	I _D = -100mA, V _{GS} = -4.0V	-	3	-	Ω
C _{iss}	Input capacitance	V _{DS} = -10V, V _{GS} = 0V, f = 1MHz	-	35	-	pF
C _{oss}	Output capacitance	V _{DS} = -10V, V _{GS} = 0V, f = 1MHz	-	7.3	-	pF
t _{ON}	Switching time	V _{DD} = -5V, I _D = -10mA V _{GS} = 0 ~ -5V	-	14	-	ns
t _{OFF}			-	100	-	

Switching time test condition

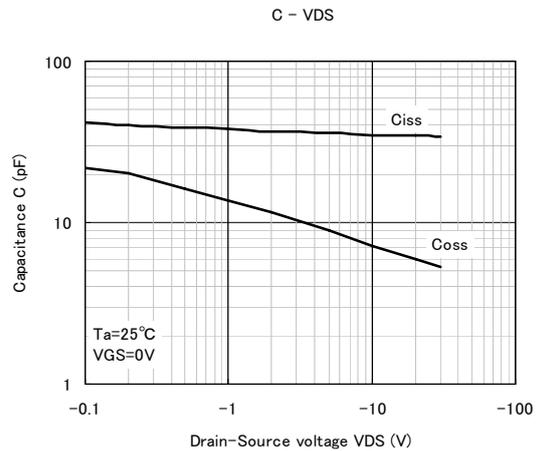
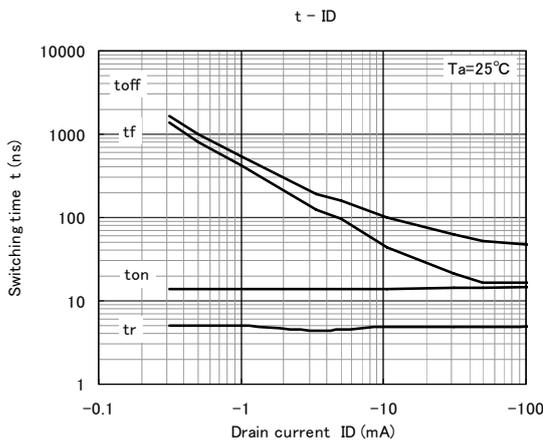
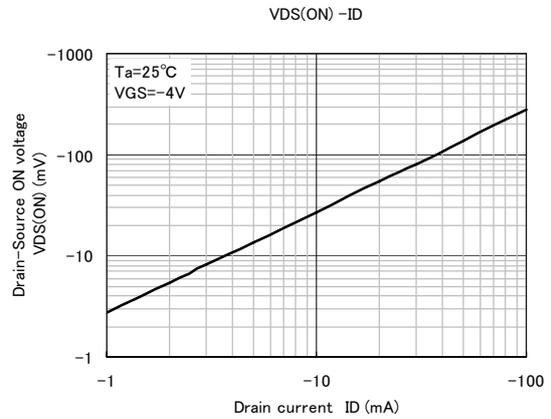
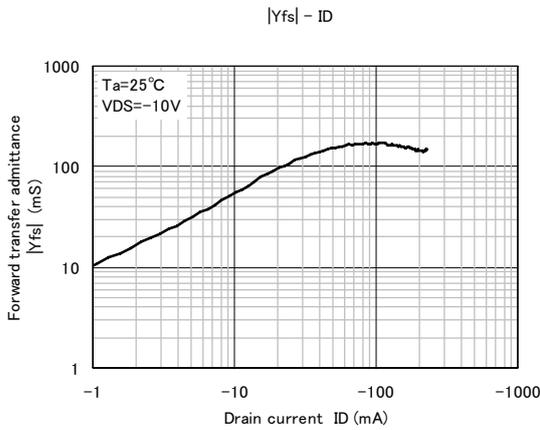
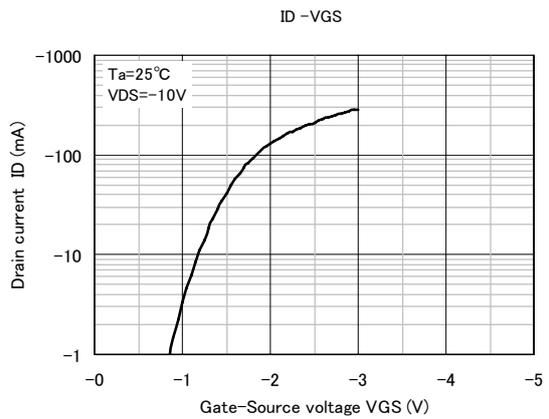
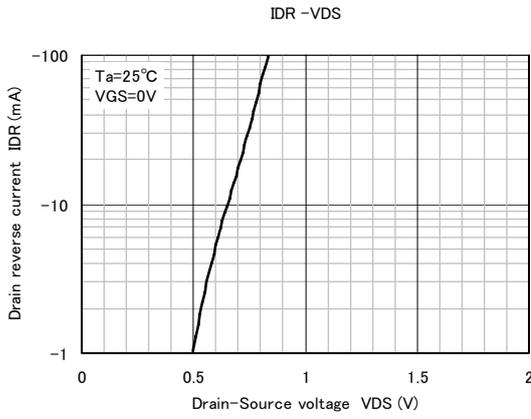
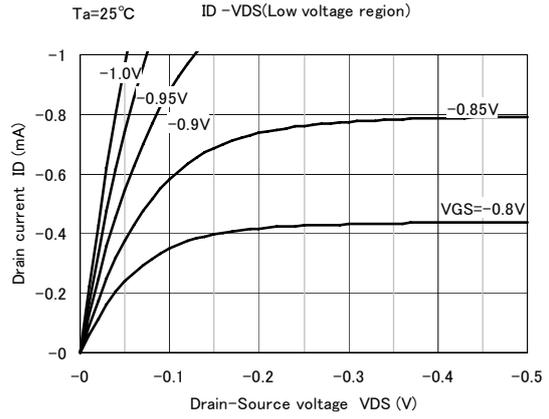
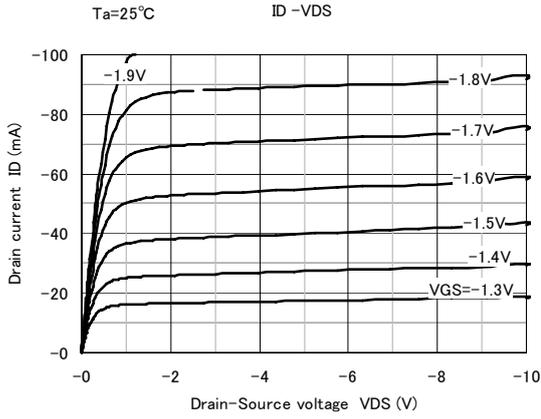
test circuit



input waveform



TYPICAL CHARACTERISTICS





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