

INJ0003AX SERIES

•PRELIMINARY

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

High speed switching
Silicon P-channel MOSFET

DESCRIPTION

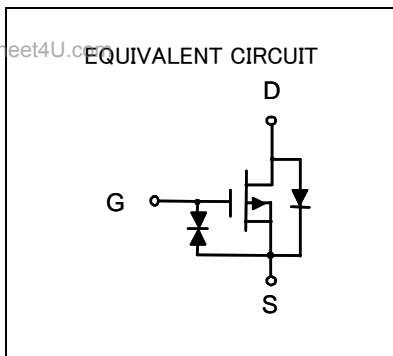
INJ0003AX is a Silicon P-channel MOSFET.
This product is most suitable for low voltage use such as portable machinery, because of low voltage drive and low on resistance.

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~-1.2V
- Low on Resistance. Ron=2Ω(TYP)
- High speed switching.
- Small package for easy mounting.

APPLICATION

high speed switching, Analog switching



OUTLINE DRAWING		Unit: mm
<p>INJ0003AT2</p> <p>JEITA, JEDEC: — ISAHAYA: T-USM</p> <p>TERMINAL CONNECTOR ①: GATE ②: SOURCE ③: DRAIN</p>	<p>INJ0003AM1</p> <p>JEITA: SC-70 JEDEC: —</p> <p>TERMINAL CONNECTOR ①: GATE ②: SOURCE ③: DRAIN</p>	
<p>INJ0003AU1</p> <p>JEITA: SC-75A JEDEC: —</p> <p>TERMINAL CONNECTOR ①: GATE ②: SOURCE ③: DRAIN</p>	<p>INJ0003AC1</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
		INJ0003AT2	INJ0003AU1	INJ0003AM1	INJ0003AC1	
V _{DSS}	Drain-source voltage	-20				V
V _{GSS}	Gate-source voltage	±8				V
I _D	Drain current	-200				mA
P _D	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)

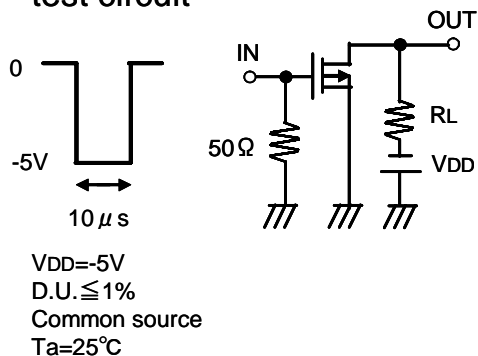
※package mounted on 9mm × 19mm × 1mm glass-epoxy substrate.

SYMBOL	PARAMETER	TEST CONDITION	LIMIT			UNIT
			MIN	TYP	MAX	
V _{(BR)DSS}	Drain-source breakdown voltage	I _D =-100 μA, V _{GS} =0V	-20	-	-	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} =-20V, 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	-	280	-	mS
R _{DS(ON)}	Static drain-source on-state resistance	I _D =-100mA, V _{GS} =-4.0V	-	2	-	Ω
C _{iss}	Input capacitance	V _{DS} =-10V, V _{GS} =0V, f=1MHz	-	37	-	pF
C _{oss}	Output capacitance	V _{DS} =-10V, V _{GS} =0V, f=1MHz	-	12	-	pF
t _{ON}	Switching time	V _{DD} =-5V, I _D =-10mA V _{GS} =0~-5V	-	16	-	ns
t _{OFF}			-	110	-	

Switching time test condition

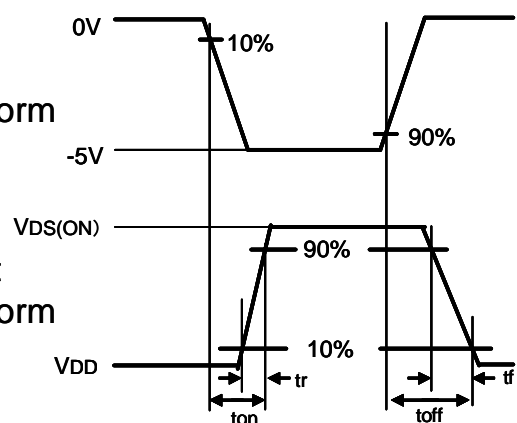
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test circuit

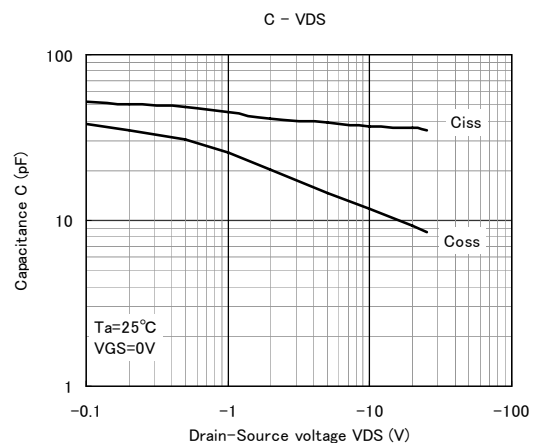
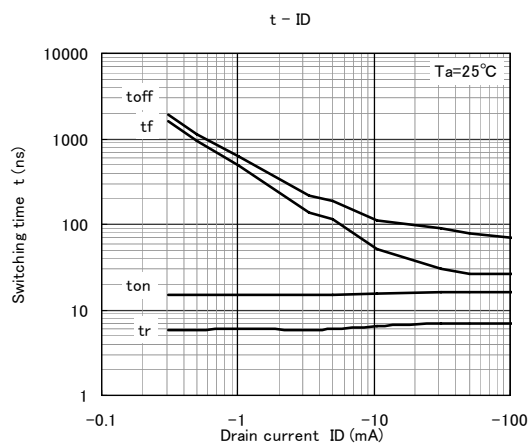
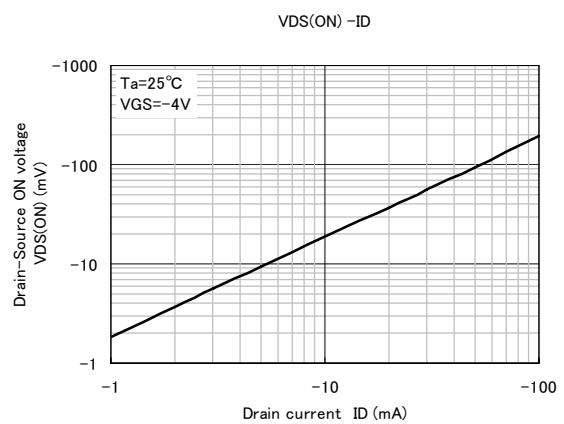
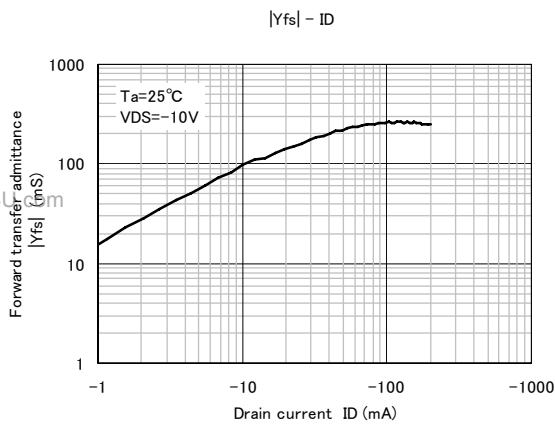
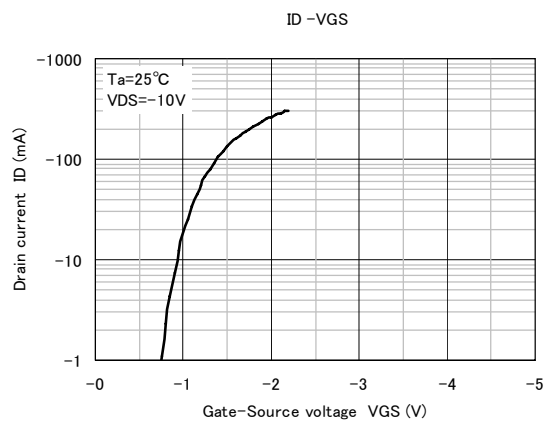
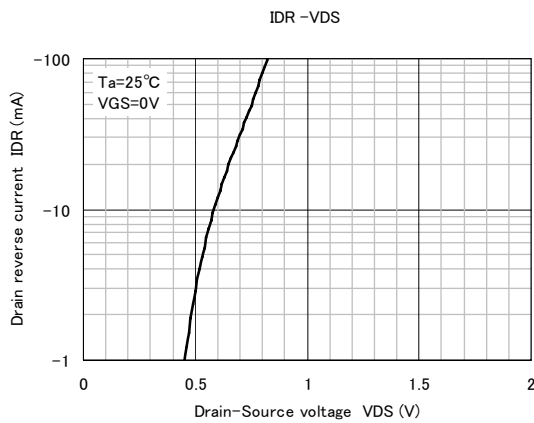
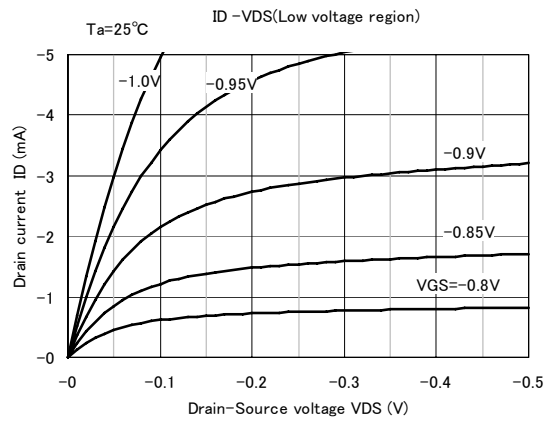
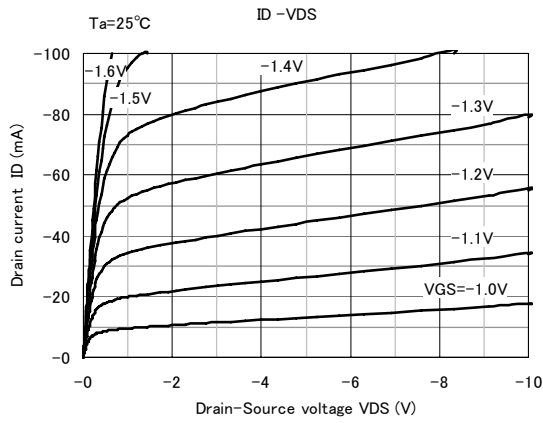


input waveform

output waveform



TYPICAL CHARACTERISTICS





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