

# 2SJ200

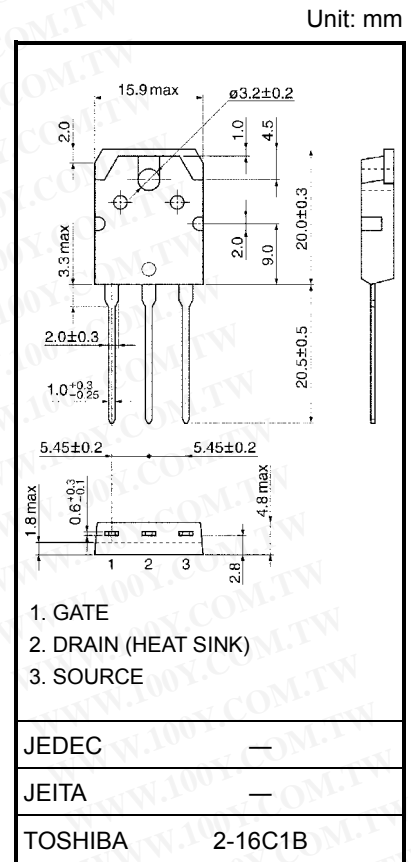
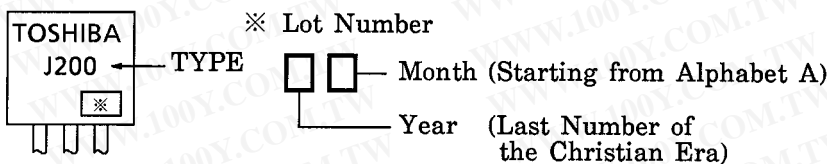
## High Power Amplifier Application

- High breakdown voltage :  $V_{DSS} = -180\text{ V}$
- High forward transfer admittance :  $|Y_{fs}| = 4.0\text{ S (typ.)}$
- Complementary to 2SK1529

## Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Drain-source voltage	$V_{DSS}$	-180	V
Gate-source voltage	$V_{GSS}$	±20	V
Drain current (Note 1)	$I_D$	-10	A
Drain power dissipation (Tc = 25°C)	$P_D$	120	W
Channel temperature	$T_{ch}$	150	°C
Storage temperature range	$T_{stg}$	-55~150	°C

## Marking



Weight: 4.6 g (typ.)

## Electrical Characteristics (Ta = 25°C)

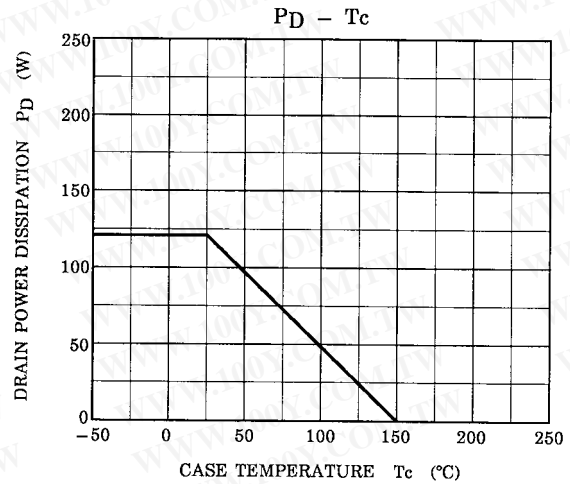
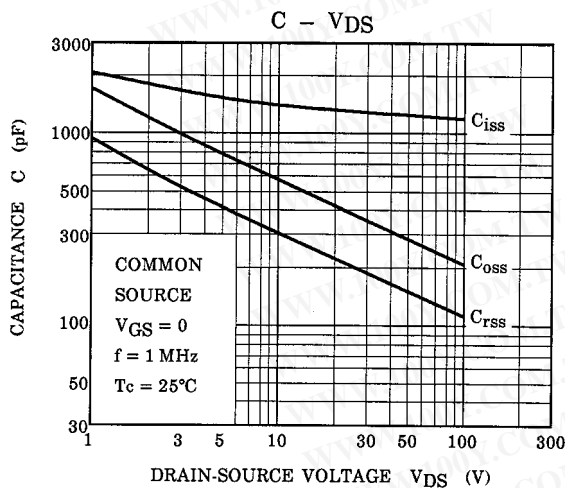
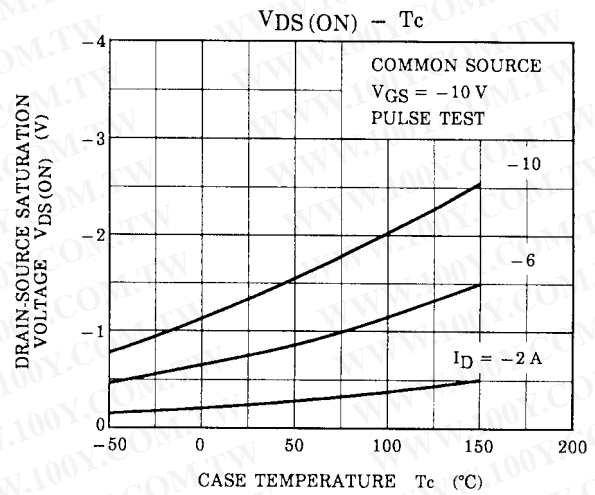
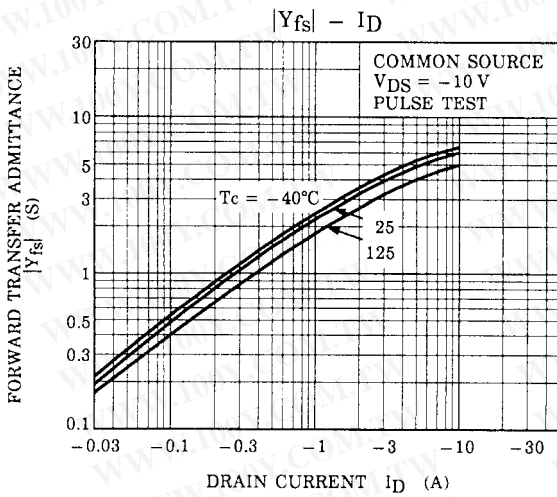
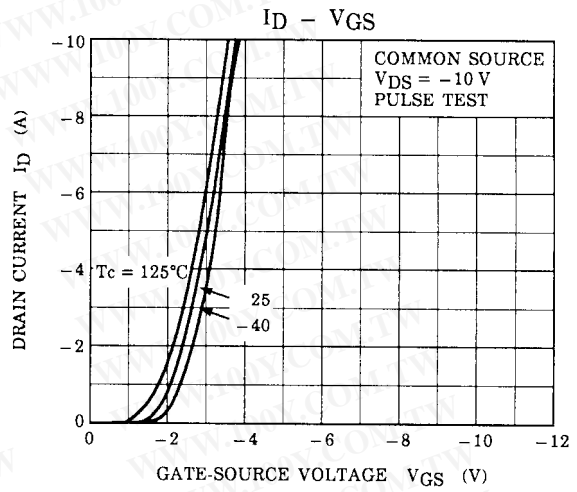
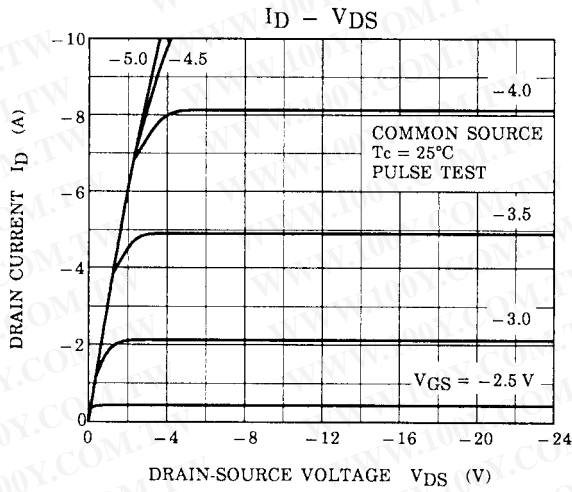
Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Drain cut-off current	$I_{DSS}$	$V_{DS} = -180\text{ V}, V_{GS} = 0$	—	—	-1.0	mA
Gate leakage current	$I_{GSS}$	$V_{DS} = 0, V_{GS} = \pm 20\text{ V}$	—	—	±0.5	µA
Drain-source breakdown voltage	$V_{(BR)DSS}$	$I_D = -10\text{ mA}, V_{GS} = 0$	-180	—	—	V
Gate-source cut-off voltage (Note 2)	$V_{GS(OFF)}$	$V_{DS} = -10\text{ V}, I_D = -0.1\text{ A}$	-0.8	—	-2.8	V
Drain-source saturation voltage	$V_{DS(ON)}$	$I_D = -6\text{ A}, V_{GS} = -10\text{ V}$	—	-1.5	-5.0	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS} = -10\text{ V}, I_D = -3\text{ A}$	—	4.0	—	S
Input capacitance	$C_{iss}$	$V_{DS} = -30\text{ V}, V_{GS} = 0, f = 1\text{ MHz}$	—	1300	—	pF
Output capacitance	$C_{oss}$	$V_{DS} = -30\text{ V}, V_{GS} = 0, f = 1\text{ MHz}$	—	350	—	
Reverse transfer capacitance	$C_{rss}$	$V_{DS} = -30\text{ V}, V_{GS} = 0, f = 1\text{ MHz}$	—	200	—	

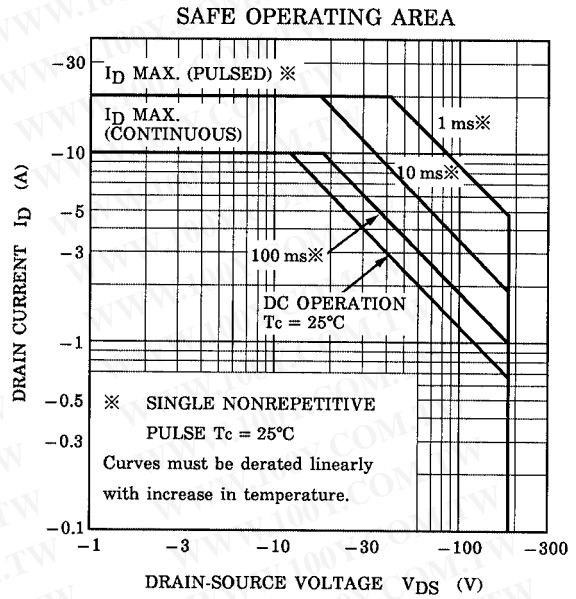
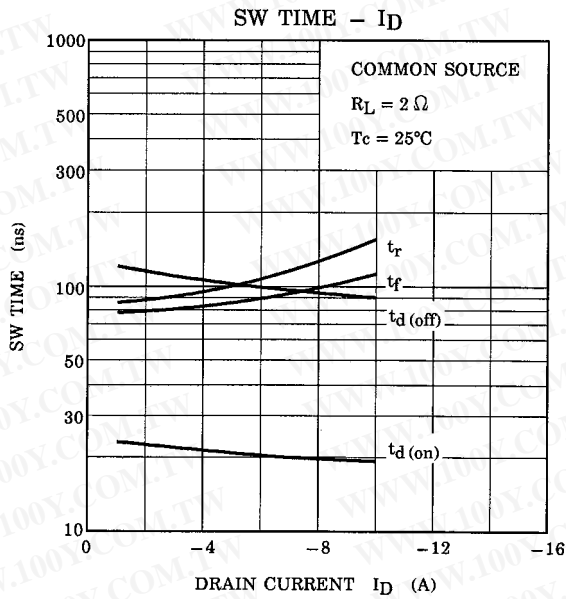
Note 1: Please use devices on condition that the channel temperature is below 150°C.

Note 2:  $V_{GS(OFF)}$  Classification O: -0.8~-1.6, Y: -1.4~-2.8

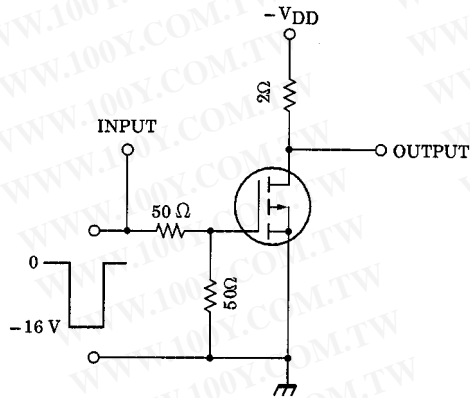
This transistor is an electrostatic sensitive device. Please handle with caution.

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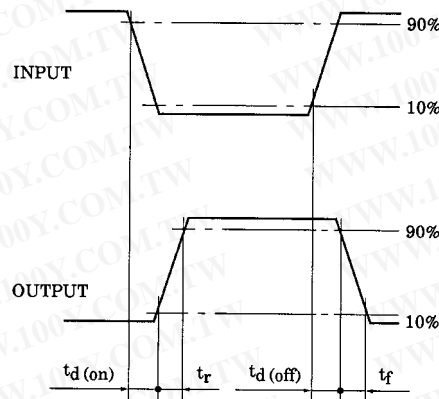




**Switching Time Test Circuit**



**Waveforms**



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