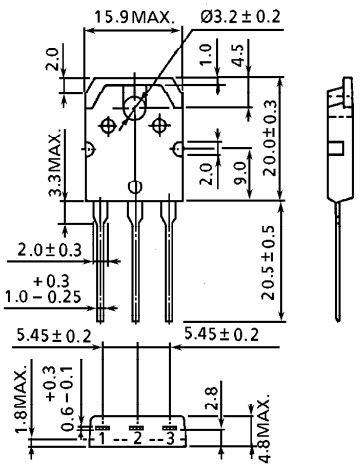
TOSHIBA FIELD EFFECT TRANSISTOR SILICON P CHANNEL MOS TYPE

2SJ200

HIGH POWER AMPLIFIER APPLICATION

Unit in mm

- High Breakdown Voltage : $V_{DSS} = -180V$
- High Forward Transfer Admittance : $|Y_{fs}| = 4.0S$ (Typ.)
- Complementary to 2SK1529



1. GATE
2. DRAIN (HEAT SINK)
3. SOURCE

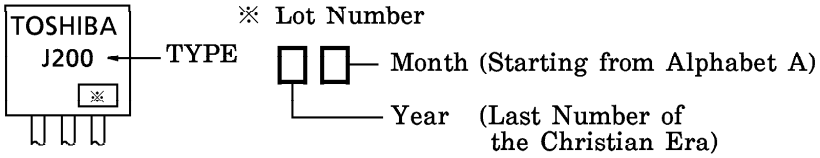
JEDEC	—
EIAJ	SC-65
TOSHIBA	2-16C1B

Weight : 4.7g

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	V_{DSS}	−180	V
Gate-Source Voltage	V_{GSS}	±20	V
Drain Current	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



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Drain Cut-Off Current	I_{DSS}	$V_{DS} = -180V$, $V_{GS} = 0$	—	—	−1.0	mA
Gate Leakage Current	I_{GSS}	$V_{DS} = 0$, $V_{GS} = \pm 20V$	—	—	±0.5	μA
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	$I_D = -10mA$, $V_{GS} = 0$	−180	—	—	V
Gate-Source Cut-Off Voltage	$V_{GS(OFF)}$ (Note)	$V_{DS} = -10V$, $I_D = -0.1A$	−0.8	—	−2.8	V
Drain-Source Saturation Voltage	$V_{DS(ON)}$	$I_D = -6A$, $V_{GS} = -10V$	—	−1.5	−5.0	V
Forward Transfer Admittance	$\|Y_{fs}\|$	$V_{DS} = -10V$, $I_D = -3A$	—	4.0	—	S
Input Capacitance	C_{iss}	$V_{DS} = -30V$, $V_{GS} = 0$, f = 1MHz	—	1300	—	pF
Output Capacitance	C_{oss}	$V_{DS} = -30V$, $V_{GS} = 0$, f = 1MHz	—	350	—	pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = -30V$, $V_{GS} = 0$, f = 1MHz	—	200	—	pF

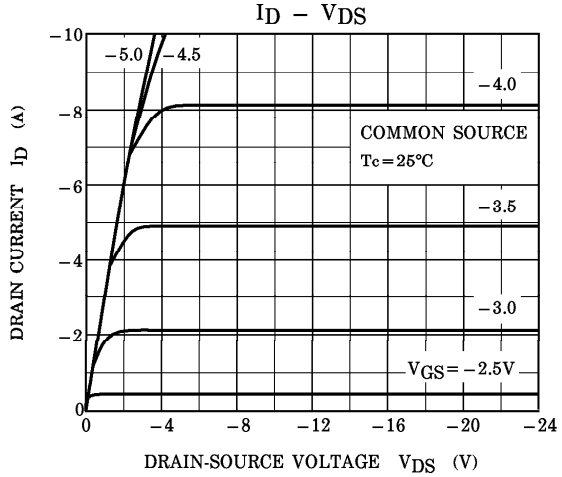
(Note) $V_{GS(OFF)}$ Classification O : −0.8~−1.6, Y : −1.4~−2.8

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

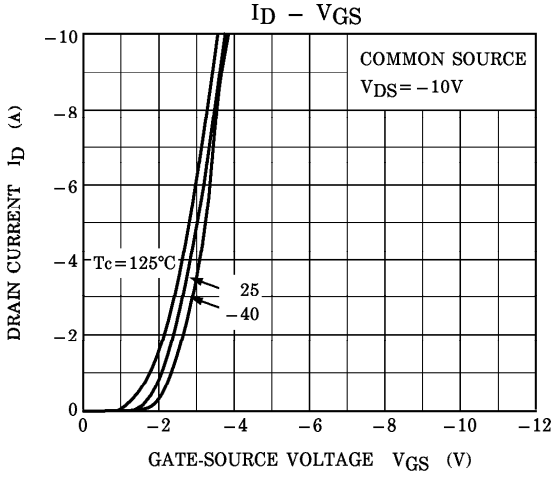
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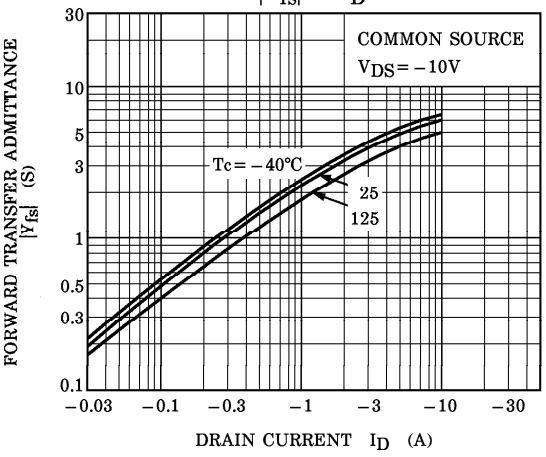
$I_D - V_{DS}$



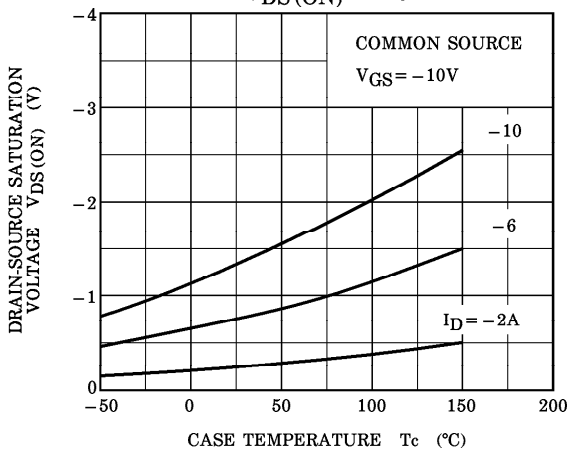
$I_D - V_{GS}$



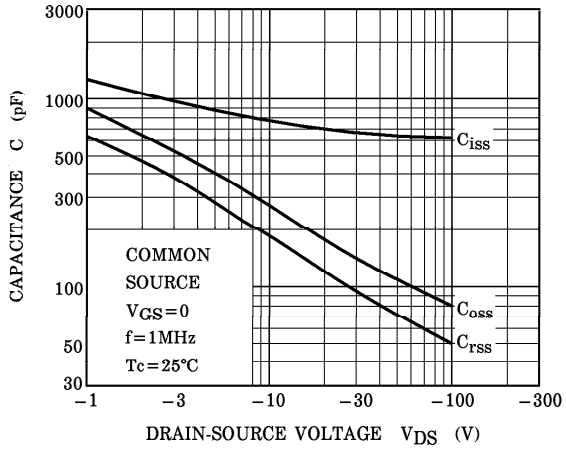
$|Y_{fs}| - I_D$



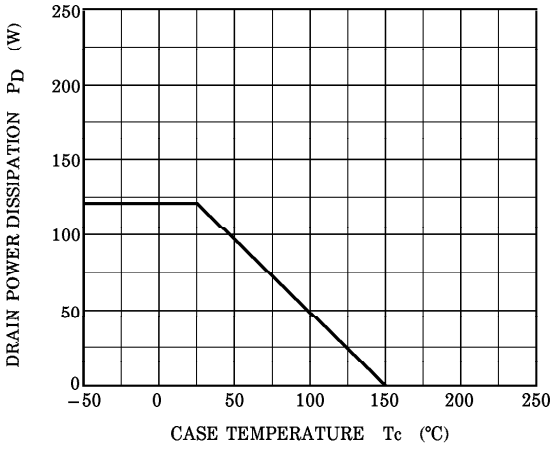
$V_{DS\,(ON)} - Tc$



$C - V_{DS}$



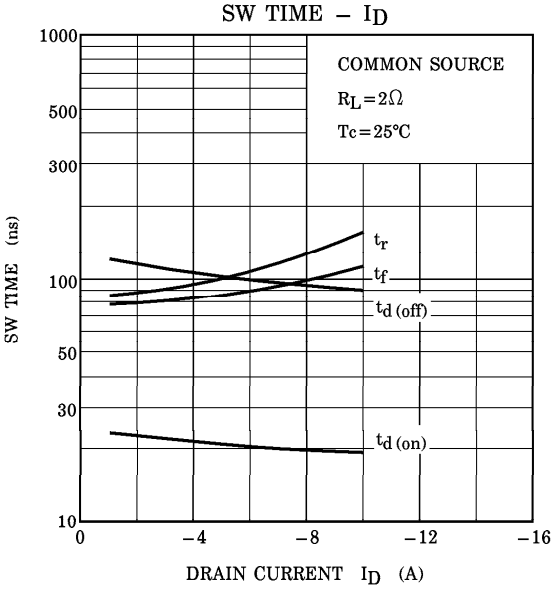
$P_D - Tc$



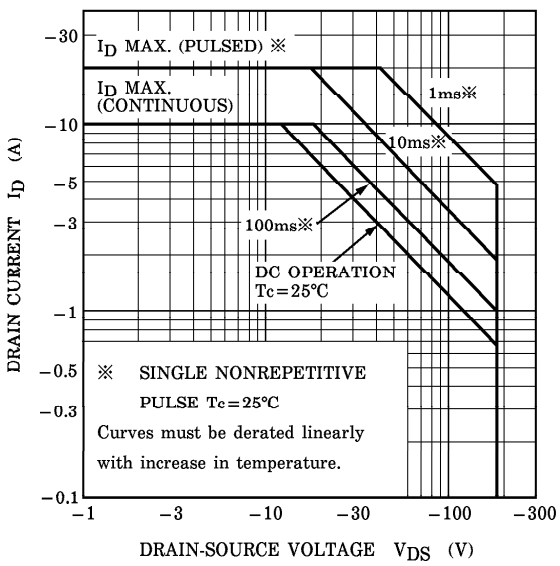
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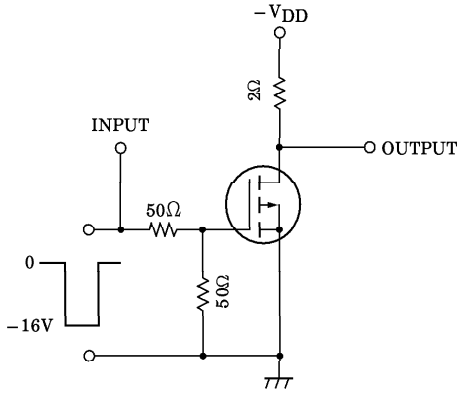
SW TIME – I_D



SAFE OPERATING AREA



SWITCHING TIME TEST CIRCUIT



WAVEFORMS

