

TOSHIBA FIELD EFFECT TRANSISTOR SILICON N CHANNEL MOS TYPE

2 S K 1 5 2 9

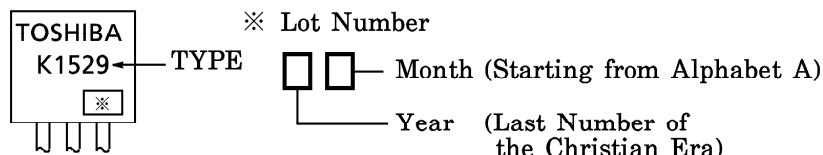
HIGH POWER AMPLIFIER APPLICATION

- High Breakdown Voltage : $V_{DSS}=180V$
- High Forward Transfer Admittance : $|Y_{fs}|=4.0S$ (Typ.)
- Complementary to 2SJ200

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 ($T_c = 25^\circ\text{C}$)	P_D	120	W
Channel Temperature	T_c	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	$-55 \sim 150$	$^\circ\text{C}$

MARKING



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

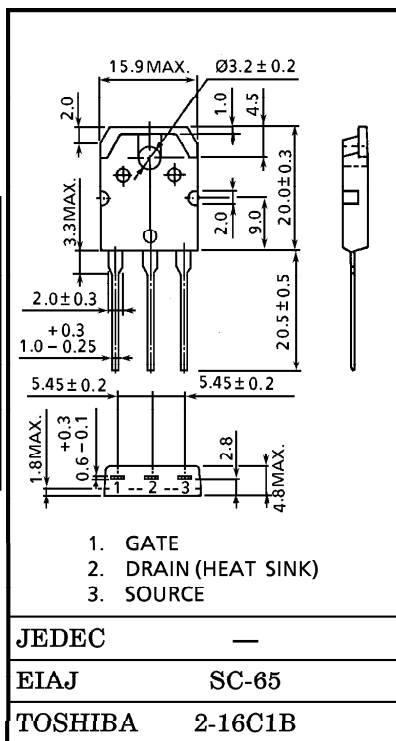
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Drain Cut-off Current	I_{DSS}	$V_{DS}=180V, V_{GS}=0$	—	—	1.0	mA
Gate Leakage Current	I_{GSS}	$V_{DS}=0, V_{GS}=\pm 20V$	—	—	± 0.5	μA
Drain-Source Breakdown Voltage	$V_{(BR) DSS}$	$I_D=10mA, V_{GS}=0$	180	—	—	V
Drain-Source Saturation Voltage	$V_{DS(ON)}$	$I_D=6A, V_{GS}=10V$	—	2.5	5.0	V
Gate-Source Cut-off Voltage (Note)	$V_{GS(OFF)}$	$V_{DS}=10V, I_D=0.1A$	0.8	—	2.8	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS}=10V, I_D=3A$	—	4.0	—	S
Input Capacitance	C_{iss}	$V_{DS}=30V, V_{GS}=0, f=1MHz$	—	700	—	pF
Output Capacitance	C_{oss}	$V_{DS}=30V, V_{GS}=0, f=1MHz$	—	150	—	pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS}=30V, V_{GS}=0, f=1MHz$	—	90	—	pF

(Note) $V_{GS(OFF)}$ Classification 0 : 0.8~1.6 Y : 1.4~2.8

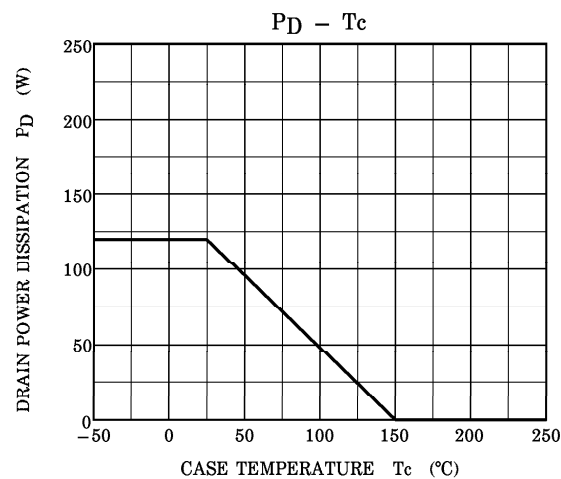
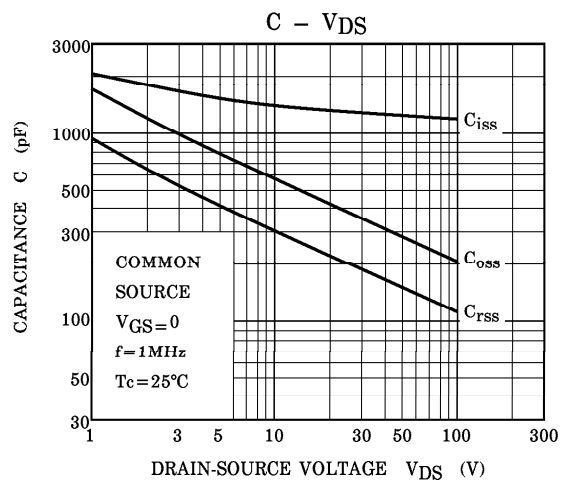
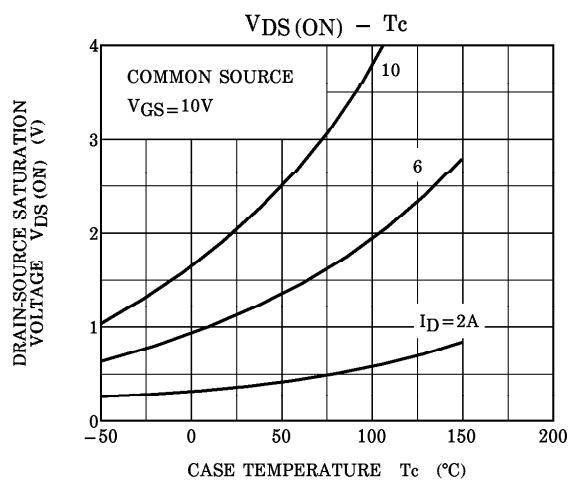
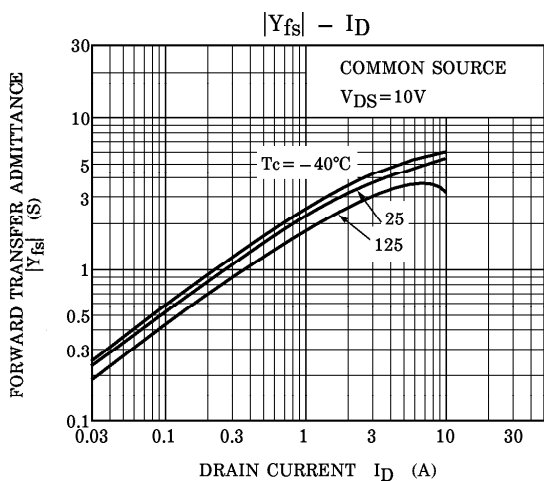
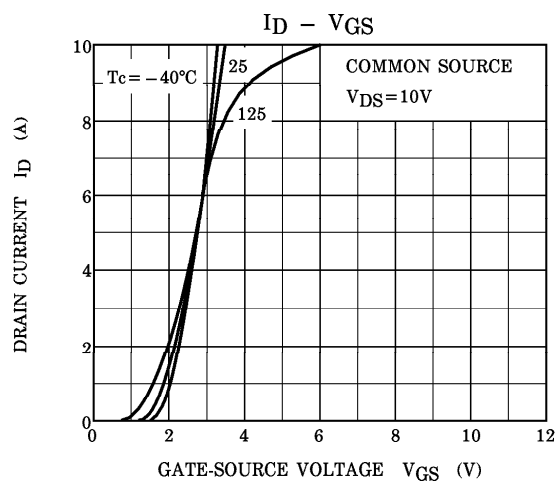
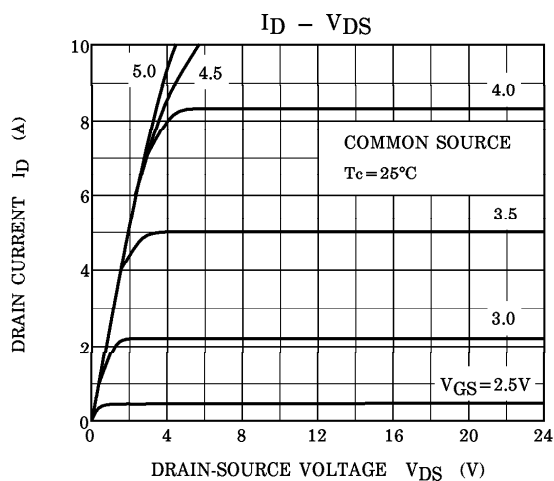
**This transistor is an electrostatic sensitive device.
Please handle with caution.**

INDUSTRIAL APPLICATIONS

Unit in mm

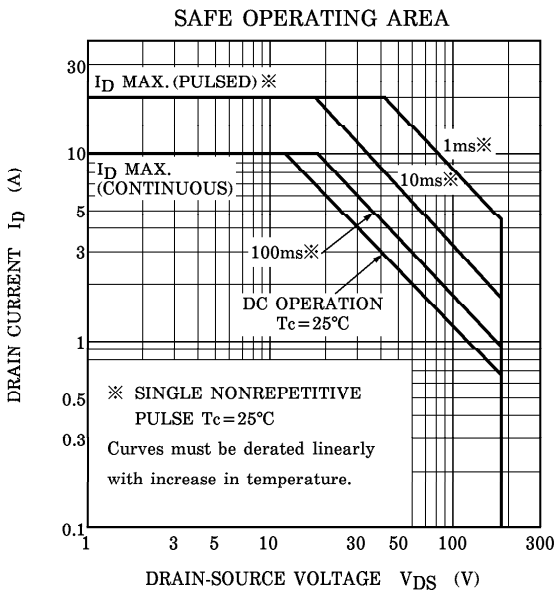
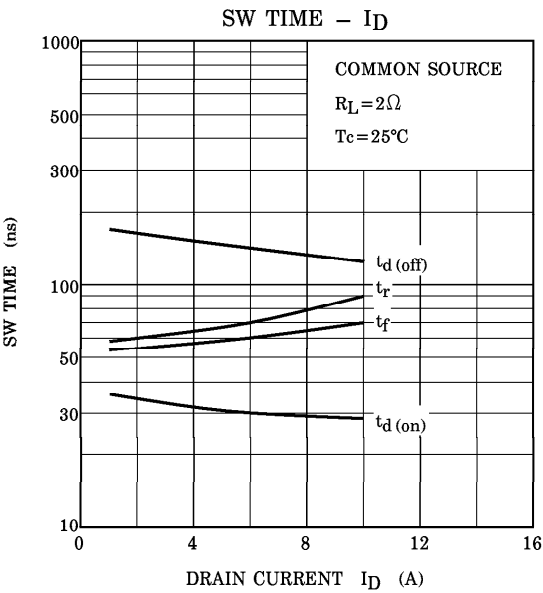


Weight : 4.7g

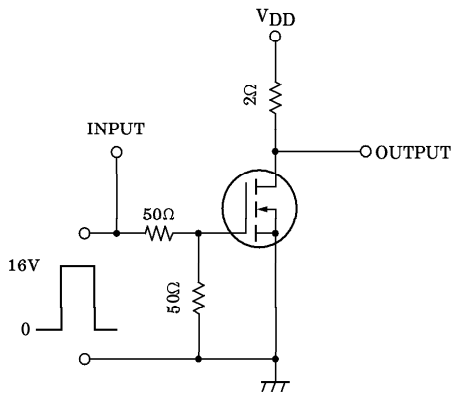


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SWITCHING TIME TEST CIRCUIT



WAVEFORMS

