

TOSHIBA FIELD EFFECT TRANSISTOR SILICON P CHANNEL MOS TYPE

# 2SJ338

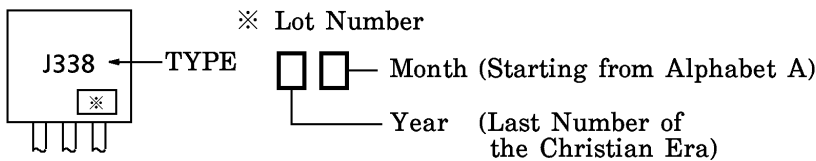
AUDIO FREQUENCY POWER AMPLIFIER APPLICATION

- High Breakdown Voltage :  $V_{DSS} = -180V$
- High Forward Transfer Admittance :  $|Y_{fs}| = 0.7S$  (Typ.)
- Complementary to 2SK2162

MAXIMUM RATINGS ( $T_a = 25^\circ C$ )

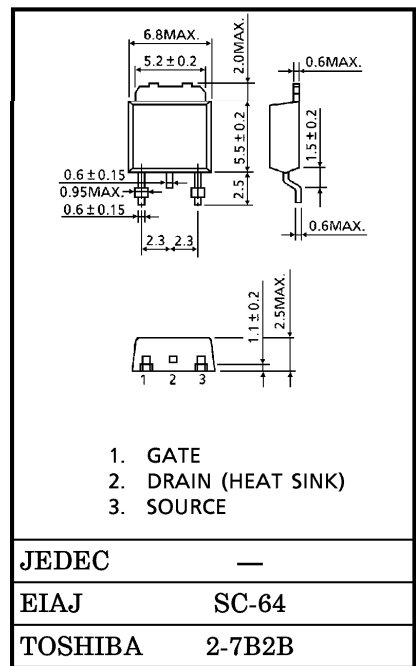
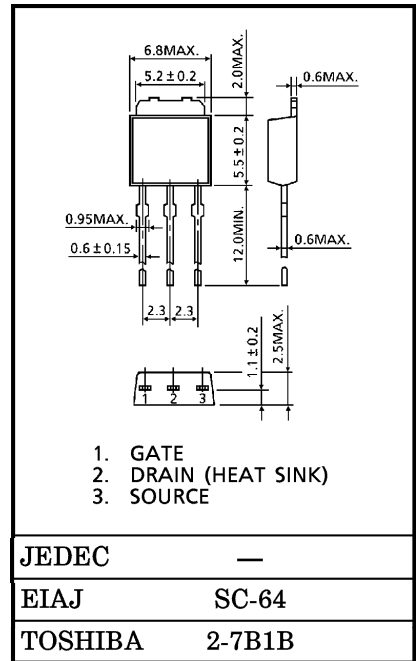
CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	$V_{DSS}$	-180	V
Gate-Source Voltage	$V_{GSS}$	$\pm 20$	V
Drain Current	$I_D$	-1	A
Power Dissipation ( $T_c = 25^\circ C$ )	$P_D$	20	W
Channel Temperature	$T_{ch}$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ C$

MARKING



INDUSTRIAL APPLICATIONS

Unit in mm



Weight : 0.36g

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## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current	$I_{GSS}$	$V_{DS}=0, V_{GS}=\pm 20V$	—	—	$\pm 100$	nA
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	$I_D = -10mA, V_{GS}=0$	-180	—	—	V
Gate-Source Cut-off Current	$V_{GS(OFF)}$ (Note)	$V_{DS} = -10V, I_D = -10mA$	-0.8	—	-2.8	V
Drain-Source Saturation Voltage	$V_{DS(ON)}$	$I_D = -0.6A, V_{GS} = -10V$	—	-1.2	-3.0	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = -10V, I_D = -0.3A$	—	0.7	—	S
Input Capacitance	$C_{iss}$	$V_{DS} = -10V, V_{GS} = 0, f = 1MHz$	—	210	—	pF
Output Capacitance	$C_{oss}$	$V_{DS} = -10V, V_{GS} = 0, f = 1MHz$	—	90	—	pF
Reverse Transfer Capacitance	$C_{rss}$	$V_{DS} = -10V, V_{GS} = 0, f = 1MHz$	—	45	—	pF

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

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