

# 2SJ338

## Audio Frequency Power Amplifier Application

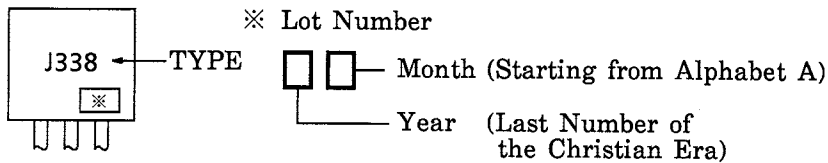
- High breakdown voltage :  $V_{DSS} = -180\text{ V}$
- High forward transfer admittance :  $|Y_{fs}| = 0.7\text{ S (typ.)}$
- Complementary to 2SK2162

### Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

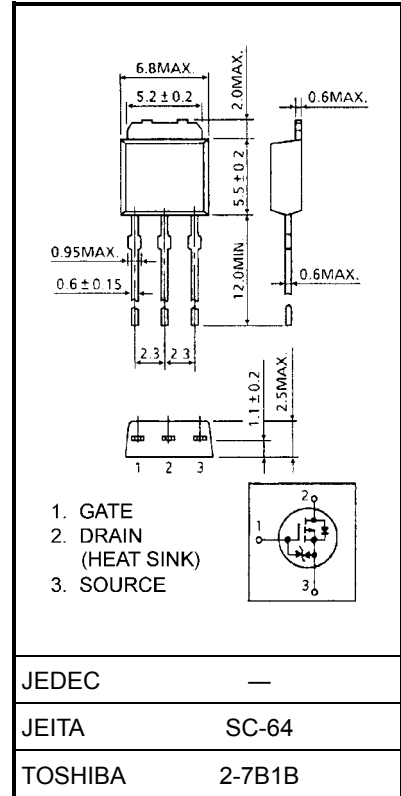
Characteristics	Symbol	Rating	Unit
Drain-source voltage	$V_{DSS}$	-180	V
Gate-source voltage	$V_{GSS}$	$\pm 20$	V
Drain current (Note 1)	$I_D$	-1	A
Power dissipation ( $T_c = 25^\circ\text{C}$ )	$P_D$	20	W
Channel temperature	$T_{ch}$	150	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-55~150	$^\circ\text{C}$

Note 1: Please use devices on condition that the channel temperature is below  $150^\circ\text{C}$ .

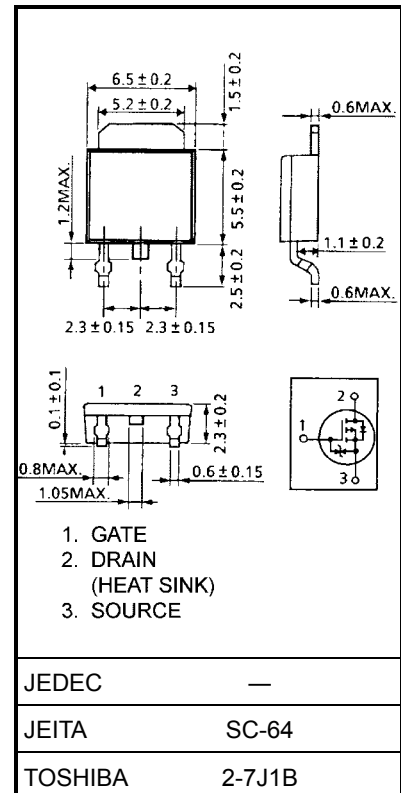
### Marking



Unit: mm



Weight: 0.36 g (typ.)



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## Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Gate leakage current	$I_{GSS}$	$V_{DS} = 0, V_{GS} = \pm 20 \text{ V}$	—	—	$\pm 100$	nA
Drain-source breakdown voltage	$V_{(BR)DSS}$	$I_D = -10 \text{ mA}, V_{GS} = 0$	-180	—	—	V
Gate-source cut-off voltage (Note 2)	$V_{GS(OFF)}$	$V_{DS} = -10 \text{ V}, I_D = -10 \text{ mA}$	-0.8	—	-2.8	V
Drain-source saturation voltage	$V_{DS(ON)}$	$I_D = -0.6 \text{ A}, V_{GS} = -10 \text{ V}$	—	-1.2	-3.0	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS} = -10 \text{ V}, I_D = -0.3 \text{ A}$	—	0.7	—	S
Input capacitance	$C_{iss}$	$V_{DS} = -10 \text{ V}, V_{GS} = 0, f = 1 \text{ MHz}$	—	210	—	pF
Output capacitance	$C_{oss}$	$V_{DS} = -10 \text{ V}, V_{GS} = 0, f = 1 \text{ MHz}$	—	90	—	
Reverse transfer capacitance	$Q_{rss}$	$V_{DS} = -10 \text{ V}, V_{GS} = 0, f = 1 \text{ MHz}$	—	45	—	

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

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

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