TOSHIBA Field Effect Transistor Silicon P Channel MOS Type

# **2SJ338**

### Audio Frequency Power Amplifier Application

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

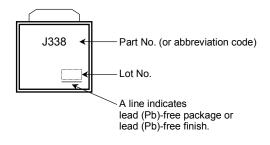
• Complementary to 2SK2162

## Maximum Ratings (Ta = 25°C)

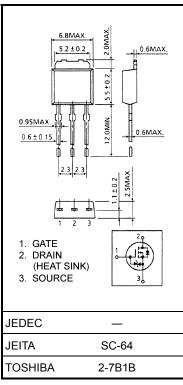
Characteristics	Symbol	Rating	Unit
Drain-source voltage	$V_{DSS}$	-180	V
Gate-source voltage	$V_{GSS}$	±20	٧
Drain current (Note 1)	I <sub>D</sub>	-1	Α
Power dissipation (Tc = 25°C)	$P_{D}$	20	W
Channel temperature	T <sub>ch</sub>	150	°C
Storage temperature range	T <sub>stg</sub>	-55~150	°C

Note 1: Ensure that the channel temperature does not exceed 150°C.

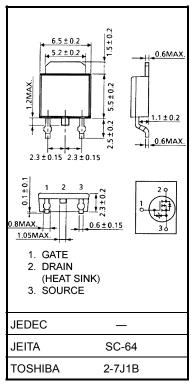
# Marking



Unit: mm



Weight: 0.36 g (typ.)



Weight: 0.36 g (typ.)

# Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Gate leakage current	I <sub>GSS</sub>	$V_{DS} = 0$ , $V_{GS} = \pm 20 \text{ V}$	_	_	±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 <sub>GS (OFF)</sub>	V <sub>DS</sub> = -10 V, I <sub>D</sub> = -10 mA	-0.8	_	-2.8	٧
Drain-source saturation voltage	V <sub>DS (ON)</sub>	$I_D = -0.6 \text{ A}, V_{GS} = -10 \text{ V}$	_	-1.2	-3.0	V
Forward transfer admittance	Y <sub>fs</sub>	$V_{DS} = -10 \text{ V}, I_D = -0.3 \text{ A}$	_	0.7	_	S
Input capacitance	C <sub>iss</sub>	$V_{DS} = -10 \text{ V}, V_{GS} = 0$ , f = 1 MHz		210	_	
Output capacitance	C <sub>oss</sub>	V <sub>DS</sub> = -10 V, V <sub>GS</sub> = 0 , f = 1 MHz	_	90	_	pF
Reverse transfer capacitance	Q <sub>rss</sub>	$V_{DS}$ = -10 V, $V_{GS}$ = 0 , f = 1 MHz	_	45	_	

Note 2: V<sub>GS</sub> (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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#### **RESTRICTIONS ON PRODUCT USE**

Handbook" etc..

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