

# **2SJ313**

## Audio Frequency Power Amplifier Application

• High breakdown voltage:  $V_{DSS} = -180 \text{ V}$ 

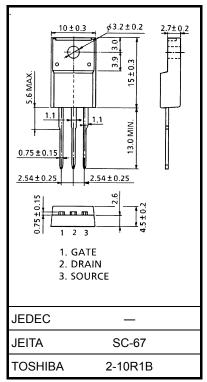
 $\bullet~$  High forward transfer admittance:  $|\,Y_{fs}\,|\,$  = 0.7 S (typ.)

• Complementary to 2SK2013

## **Absolute Maximum Ratings (Ta = 25°C)**

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

Unit: mm



Weight: 1.9 g (typ.)

## **Electrical Characteristics (Ta = 25°C)**

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Gate leakage current	I <sub>GSS</sub>	V <sub>DS</sub> = 0, V <sub>GS</sub> = ±20 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</sub> (OFF)	$V_{DS} = -10 \text{ V}, I_D = -10 \text{ mA}$	-0.8	_	-2.8	V
Drain-source saturation voltage	V <sub>DS</sub> (ON)	I <sub>D</sub> = -0.6 A, V <sub>GS</sub> = -10 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>		_	210	_	
Output capacitance	Coss	$V_{DS} = -10 \text{ V}, V_{GS} = 0, f = 1 \text{ MHz}$	_	90	_	pF
Reverse transfer capacitance	C <sub>rss</sub>		_	45	_	

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

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

This transistor is the electrostatic-sensitive device.

Please handle with caution.

### Marking

