

**Features**

- . Ultrasmall package facilitates miniaturization in end products.
- . Especially suited for use Electret Condenser Microphone for telephone and audio equipments. (ECM)
- . Excellent voltage characteristics.
- . Excellent transient characteristics.
- . Free of Halogen.

**Adoption Maximum Ratings/Ta=25**

Event	Code	Set	Unit
Gate to Drain Voltage	V <sub>GDO</sub>	-20	V
Drain Current	I <sub>D</sub>	1	m A
Gate Current	I <sub>G</sub>	10	m A
Allowable Power Dissipation	P <sub>D</sub>	100	m W
Junction Temperature	T <sub>j</sub>	150	
Storage Temperature	T <sub>stg</sub>	-55 to +150	

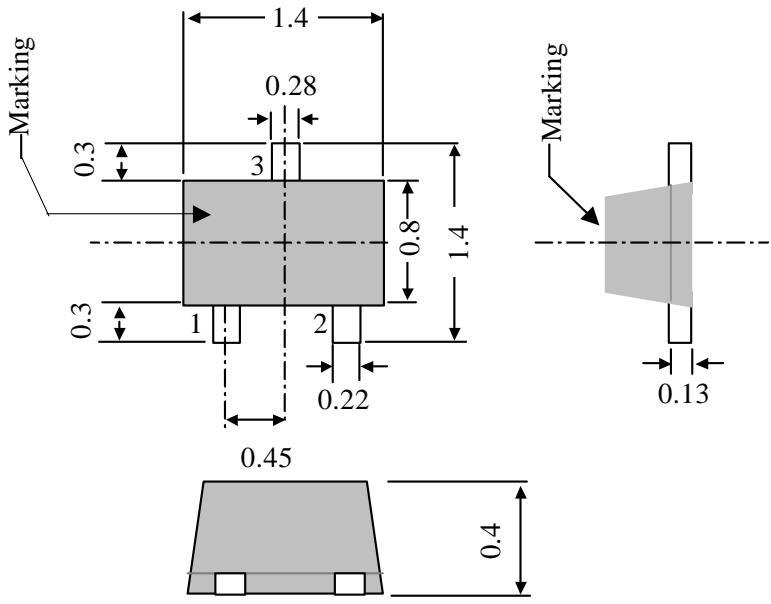
**Electrical Characteristics/Ta=25**

Event	Code	Set	MIN	TYP	MAX	Unit
G-D Breakdown Voltage	V <sub>GDO</sub>	I <sub>G</sub> =-100uA	-20			V
Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> = 2.0 V , V <sub>GS</sub> = 0	140		350	u A
Gate off Voltage	V <sub>GS(OFF)</sub>	V <sub>DS</sub> = 2.0 V , I <sub>D</sub> = 1 u A	-0.1		-1.0	V
Forward Transfer Admittance	Y <sub>fs</sub>	V <sub>DS</sub> = 2.0 V , V <sub>GS</sub> = 0 , f = 1KHz	0.5			m S
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = 2.0 V , V <sub>GS</sub> = 0 , f = 1MHz		5.0		p F
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> = 2.0 V , V <sub>GS</sub> = 0 , f = 1MHz		1.1		p F

**The FJT TF222B is classified by IDSS as follows :(unit:uA)**

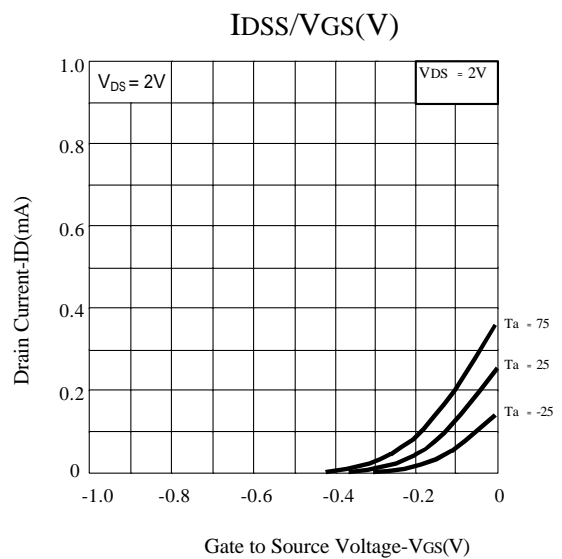
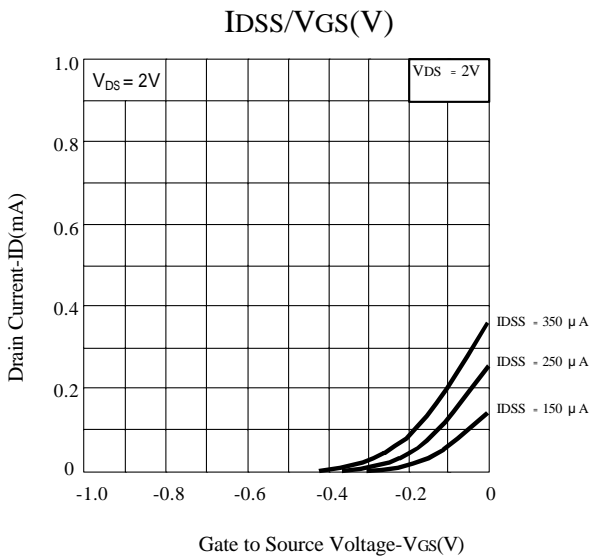
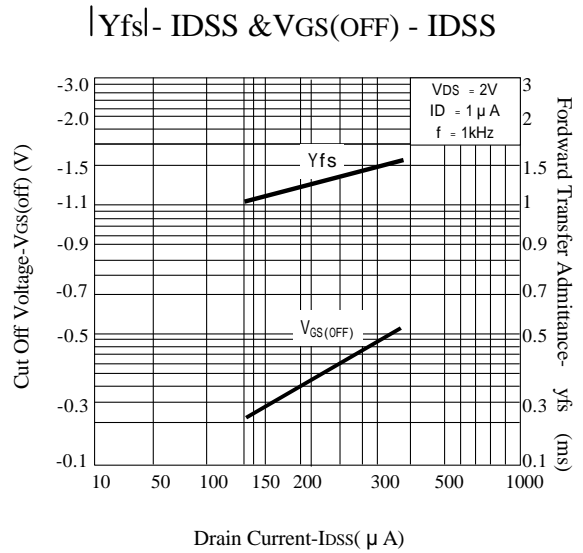
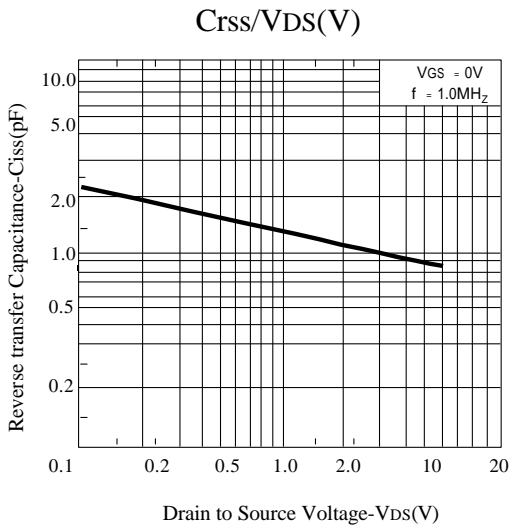
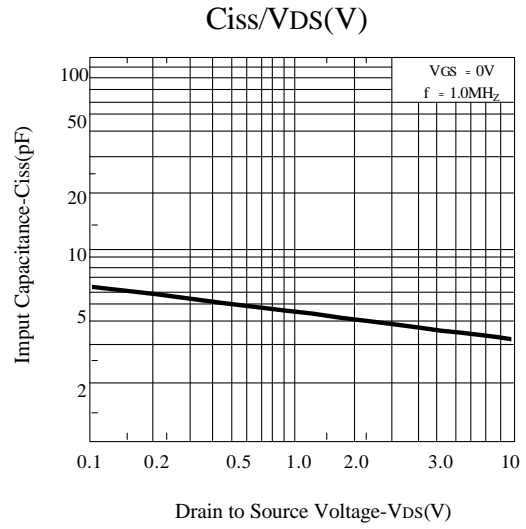
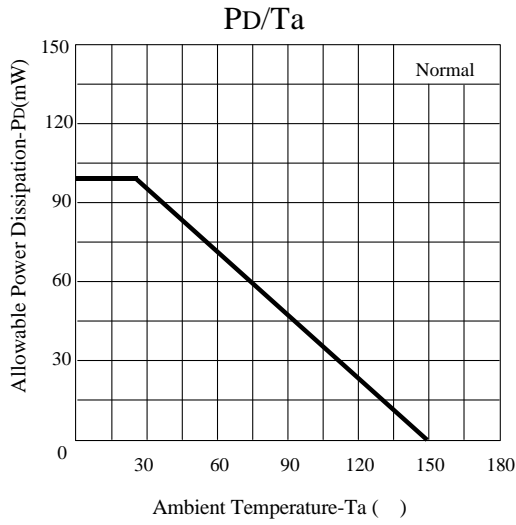
Marking	B4	B5
IDSS	140 to 240	210 to 350

**Package Dimensions**



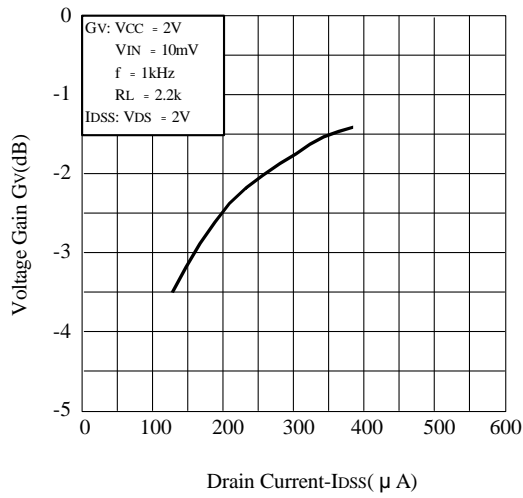
1 : Drain  
 2 : Source  
 3 : Gate  
 SOT-113S(unit:mm)

Electrical Characteristics Curve(Ta=25 )

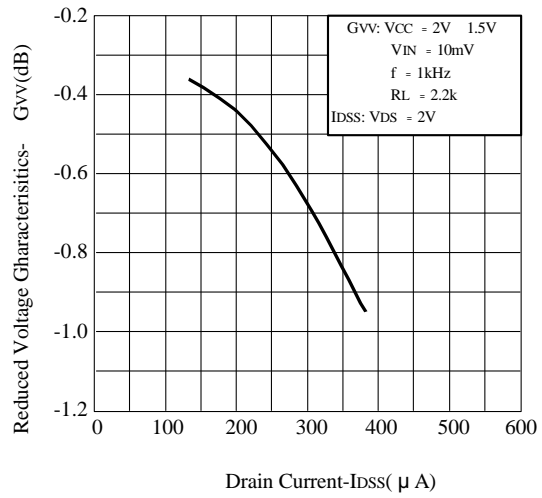


特性曲線(Ta=+25 )

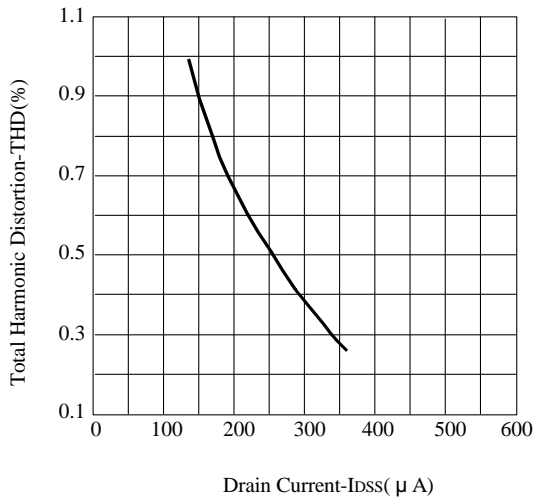
GV/Idss



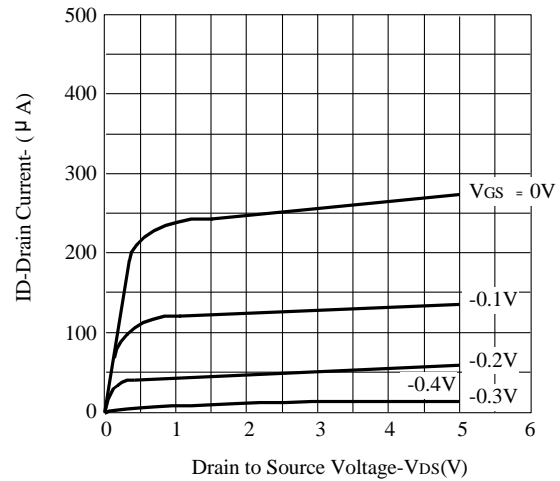
GvV/IdSS



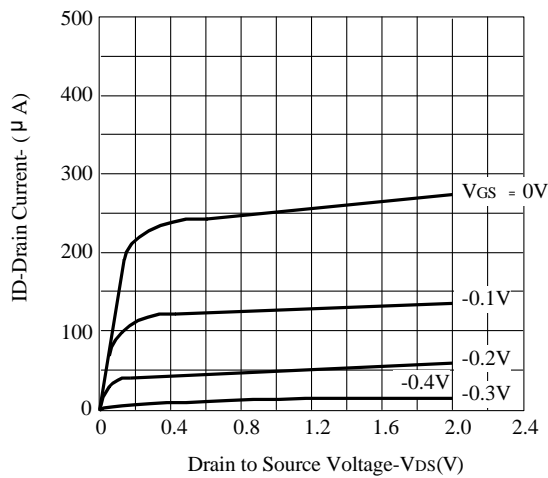
THD/IdSS



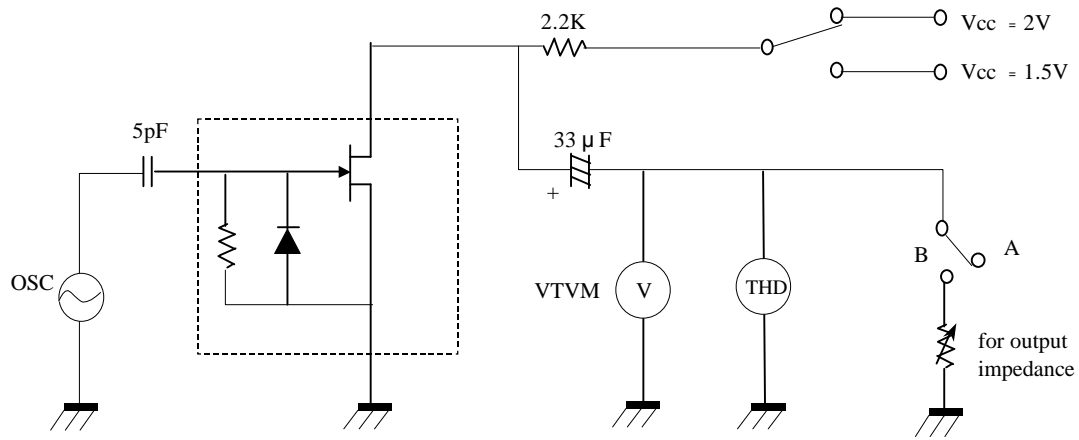
ID-VDS



ID-VDS



TEST CIRCUIT (Ta=25 )



PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Voltage Gain	G <sub>v</sub>	V <sub>IN</sub> = 10mV, f = 1KHZ		-2.0		dB
Reduced Voltage Characteristic	G <sub>VV</sub>	V <sub>IN</sub> = 10mV, f = 1KHZ , V <sub>CC</sub> = 2.0V 1.5V		-0.6	-2.0	dB
Frequency Characteristic	G <sub>vf</sub>	f = 1KHZ to 110HZ			-1.0	dB
Total Harmonic Distortion	THD	V <sub>IN</sub> = 30mV, f = 1KHZ		0.7		%
Output Noise Voltage	V <sub>NO</sub>	V <sub>IN</sub> = 0V, A CURVE			-102	dB