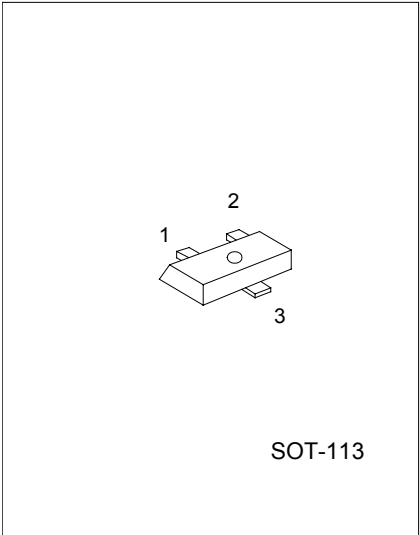


CAPACITOR MICROPHONE
APPLICATIONS

FEATURES

- *Ultrasmall-sized package permitting TF202 appliedses to be made small and slim.
- *Especially suited for use in audio,telephone capacitor microphones.
- *Excellent voltage characteristic.
- *Excellent transient characteristic.
- *Adoption of FBET process.



SOT-113

1:SOURCE 2:DRAIN 3. GATE

ABSOLUTE MAXIMUM RATINGS (Ta=25°C ,unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Gate Drain Voltage	V _{GDO}	-20	V
Gate Current	I _G	10	mA
Drain Current	I _D	1	mA
Power Dissipation	P _D	100	mW
Junctin Temperature	T _j	150	°C
Storage Temperature	T _{STG}	-55~+150	°C

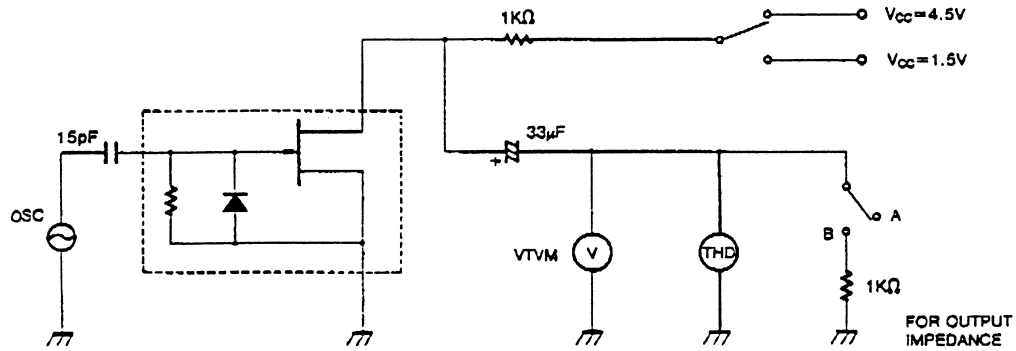
ELECTRICAL CHARACTERISTICS(Ta=25°C,unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Gate Drain Breakdown Voltage	B(BR)GDO	I _G =-100μA	-20			V
Gate Source Cut off Voltage	V _{GS(off)}	V _{DS} =5V,I _D =1μA	-0.2	-0.6	-1.2	V
Drain Current	I _{DSS}	V _{DS} =5V,V _{GS} =0	140		500	μA
Forward Transfer Admittance	I _{YFSI}	V _{DS} =5V,V _{GS} =0,f=1KHz	0.5	1.2		mS
Input Capacitance	C _{ISS}	V _{DS} =5V,V _{GS} =0,f=1MHz		3.5		pF
Output Capacitance	C _{RSS}	V _{DS} =5V,V _{GS} =0,f=1MHz		0.65		pF

CLASSIFICATION OF I_{DSS}

RANK	E4	E5	E6
I _{DSS} (μA)	140-240	210-350	320-500

TEST CIRCUIT(Ta=25°C)



PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Voltage Gain	G _v	V _{IN} =10mV, f=1KHz		-3		dB
Reduced Voltage Characteristic	ΔG _v V	V _{IN} =10mV, f=1KHz, V _{CC} =4.5V→1.5V		-1.2	-3.5	dB
Frequency Characteristic	ΔG _v f	f=1KHz to 110Hz			-1	dB
Input Resistance	Z _{IN}	f=1KHz	25			MΩ
Output Resistance	Z _O	f=1KHz			700	Ω
Total Harmonic distortion	THD	V _{IN} =30mV, f=1KHz		1		%
Output Noise Voltage	V _{NO}	V _{IN} =0, A CURVE			-110	dB