

TENTATIVE

Features

- Especially suited for use in electret condenser microphone.
- TS788 is possible to make applied sets smaller and Slimmer.
- Excellent voltage characteristics.
- Excellent transient characteristics.
- Adoption of FBET process.

Absolute Maximum Ratings / Ta=25°C

			unit
Gate to Drain Voltage	VGDO	-20	V
Gate Current	IG	10	mA
Drain Current	ID	1	mA
Allowable Power Dissipation	PD	100	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55to+150	°C

Electrical Characteristics / Ta=25°C

			min	typ	max	unit
G-D Breakdown Voltage	V(BR)GDO	IG=-100μA	-20			V
Cutoff Voltage	VGS(off)	VDS=5V, ID=1μA	-0.2	-0.6	-1.5	V
Drain Current	IDSS	VDS=5V, VGS=0	140*		500*	μA
Forward Transfer Admittance	Yfs	VDS=5V, VGS=0, f=1kHz	0.4	1.2		mS
Input Capacitance	Ciss	VDS=5V, VGS=0, f=1MHz		4.1		pF
Reverse Transfer Capacitance	Crss	VDS=5V, VGS=0, f=1MHz		0.88		pF

* : The TS788 is classified by IDSS as follows : (unit : μA)

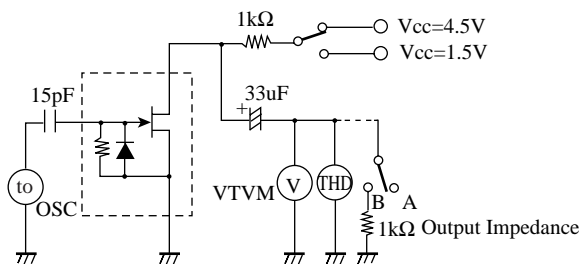
Marking	E4	E5	E6
IDSS	140 to 240	210 to 350	320 to 500

[Ta=25°C, VCC=4.5V, RL=1kΩ, CIN=15pF, See specified Test Circuit.]

			min	typ	max	unit
Voltage Gain	GV	VIN=10mV, f=1kHz		-3.0		dB
Reduced Voltage Characteristics	ΔGVV	VIN=10mV, f=1kHz VCC=4.5→1.5V		-1.2	-3.5	dB
Frequency Characteristics	ΔGVf	f=1kHz to 110Hz			-1.0	dB
Input Resistance	ZIN	f=1kHz	25			mΩ
Output Resistance	Zo	f=1kHz			700	Ω
Total Harmonic Distortion	THD	VIN=30mV, f=1kHz		1.0		%
Output Noise Voltage	VNO	VIN=0, A curve			-110	dB

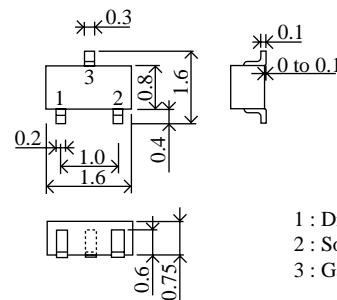
Test Circuit

Voltage Gain
Frequency Characteristics
Distortion
Reduced Voltage Characteristics



Package Dimensions

SMCP (unit : mm)



1 : Drain
2 : Source
3 : Gate