

LOW NOISE AUDIO AMPLIFIER APPLICATIONS.
DIFFERENTIAL AMPLIFIER APPLICATIONS.

FEATURES:

- 1 Chip Dual Type.
- High $|Y_{fs}|$: $|Y_{fs}|=22\text{ms(Typ.)}$
($V_{DS}=-10\text{V}$, $V_{GS}=0$, $f=1\text{kHz}$, $I_{DSS}=-3\text{mA}$)
- Good Pair Characteristics :
 $|V_{GS1}-V_{GS2}|=30\text{mV(Max.)}$ ($V_{DS}=-10\text{V}$, $I_D=-1\text{mA}$)
- Very Low Noise : $NF=0.5\text{dB(Typ.)}$
($V_{DS}=-10\text{V}$, $I_D=-1\text{mA}$, $R_g=1\text{k}\Omega$, $f=1\text{kHz}$)
- Very High Input Impedance : $I_{GSS}=10\text{nA(Max.)}$
($V_{GS}=30\text{V}$, $V_{DS}=0$)

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Gate-Drain Voltage	V_{GDS}	30	V
Gate Current	I_G	10	mA
Drain Power Dissipation	P_D	200	mW/UNIT
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 125	$^\circ\text{C}$

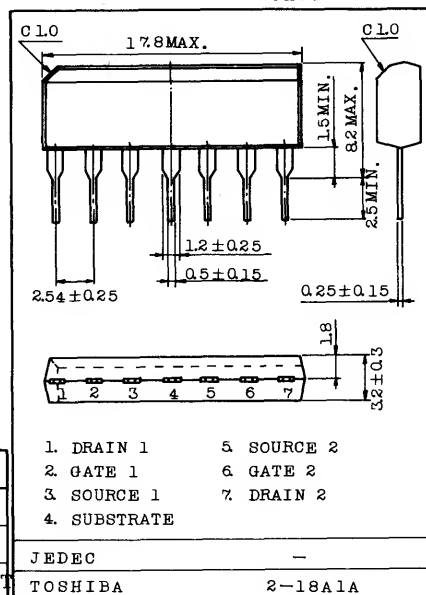
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current	I_{GSS}	$V_{GS}=30\text{V}$, $V_{DS}=0$	-	-	10	nA
Gate-Drain Breakdown Voltage	$V_{(BR)GDS}$	$V_{DS}=0$, $I_G=100\mu\text{A}$	30	-	-	V
Drain Current	$I_{DSS}(\text{Note})$	$V_{DS}=-10\text{V}$, $V_{GS}=0$	-1.0	-	-20	mA
Gate-Source Cut-off Voltage	$V_{GS}(\text{OFF})$	$V_{DS}=-10\text{V}$, $I_D=-0.1\mu\text{A}$	0.2	-	2.0	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS}=-10\text{V}$, $V_{GS}=0$, $f=1\text{kHz}$ $I_{DSS}=-3\text{mA}$	8	22	-	ms
Forward Transfer Admittance Ratio	$ Y_{fs(s)} $ $ Y_{fs(L)} $	$V_{DS}=-10\text{V}$, $V_{GS}=0$, $f=1\text{kHz}$	0.9	-	-	-
Differential Gate-Source Voltage	$ V_{GS1}-V_{GS2} $	$V_{DS}=-10\text{V}$, $I_D=-1\text{mA}$	-	-	30	mV
Input Capacitance	C_{iss}	$V_{DS}=-10\text{V}$, $V_{GS}=0$, $f=1\text{MHz}$	-	95	-	pF
Reverse Transfer Capacitance	C_{rss}	$V_{DG}=-10\text{V}$, $I_D=0$, $f=1\text{MHz}$	-	29	-	pF
Noise Figure	NF(1)	$V_{DS}=-10\text{V}$, $R_g=1\text{k}\Omega$, $I_D=-1\text{mA}$, $f=10\text{Hz}$	-	-	11	dB
	NF(2)	$V_{DS}=-10\text{V}$, $R_g=1\text{k}\Omega$, $I_D=-1\text{mA}$, $f=1\text{kHz}$	-	-	2	dB

Note : I_{DSS} Classification

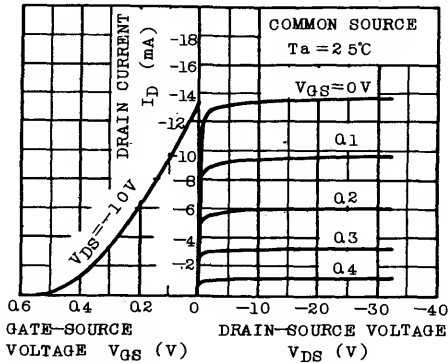
Y : -1.0 ~ -3.0mA, GR : -2.6 ~ -6.5mA,
BL : -6 ~ -12mA, V : -10 ~ -20mA

Unit in mm



Weight: 0.7g

STATIC CHARACTERISTICS



ID - VDS (LOW VOLTAGE REGION)

