

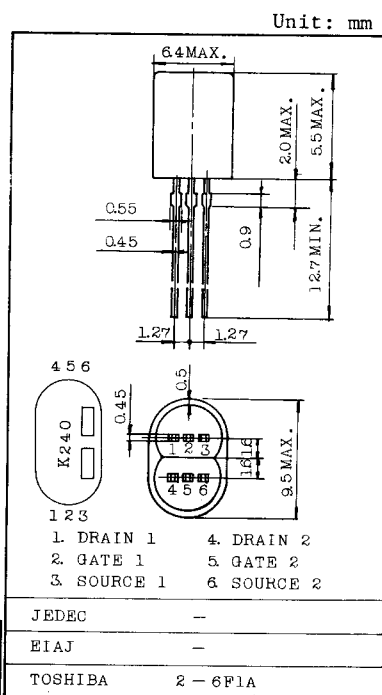
LOW NOISE AUDIO AMPLIFIER APPLICATIONS.
DIFFERENTIAL AMPLIFIER APPLICATIONS.

FEATURES:

- Recommended for first stages of EQ Amplifiers.
- High $|y_{fs}|$: $|y_{fs}|=22\text{mS}(\text{Typ.})$
($V_{DS}=10\text{V}$, $V_{GS}=0$, $I_{DSS}=3\text{mA}$)
- Excellent Pair Characteristics
: $|V_{GS1} - V_{GS2}|=20\text{mV}(\text{Max.})$
($V_{DS}=10\text{V}$, $I_D=1\text{mA}$)
- High Breakdown Voltage : $V_{GDS}=-40\text{V}(\text{Min.})$
- Low Noise : $e_n=0.95\text{nV}/\sqrt{\text{Hz}}(\text{Typ.})$
($V_{DS}=10\text{V}$, $I_D=1\text{mA}$, $f=1\text{kHz}$)
- High Input Impedance : $I_{GSS}=-1\text{nA}(\text{Max.})$ ($V_{GS}=-30\text{V}$)
- Complementary to 2SJ75.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Gate-Drain Voltage	V_{GDS}	-40	V
Gate Current	I_G	10	mA
Drain Power Dissipation	P_D	400×2	mW
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~125	$^\circ\text{C}$



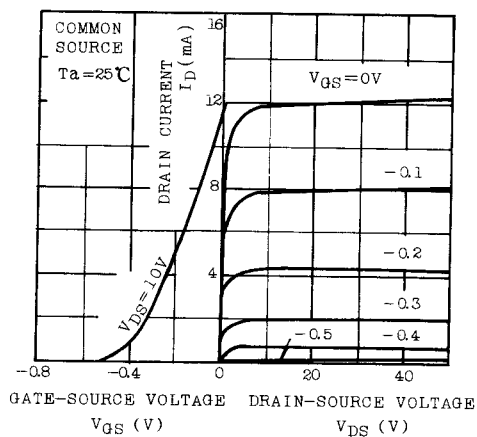
Weight: 0.72 g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current	I_{GSS}	$V_{GS}=-30\text{V}$, $V_{DS}=0$	-	-	-1.0	nA
Gate-Drain Breakdown Voltage	$V(\text{BR})_{GDS}$	$V_{DS}=0$, $I_G=-100\mu\text{A}$	-40	-	-	V
Drain Current	$I_{DSS}(\text{Note})$	$V_{DS}=10\text{V}$, $V_{GS}=0$	2.6	-	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	-	-1.5	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=10\text{V}$, $V_{GS}=0$, $f=1\text{kHz}$	15	22	-	mS
Differential Gate-Source Voltage	$ V_{GS1}-V_{GS2} $	$V_{DS}=10\text{V}$, $I_D=1\text{mA}$	-	-	20	mV
Input Capacitance	C_{iss}	$V_{DS}=10\text{V}$, $V_{GS}=0$, $f=1\text{MHz}$	-	30	-	pF
Reverse Transfer Capacitance	C_{rss}	$V_{DG}=10\text{V}$, $I=0$, $f=1\text{MHz}$	-	6	-	pF
Noise Figure	NF(1)	$V_{DS}=10\text{V}$, $I_D=1.0\text{mA}$, $R_g=1\text{k}\Omega$, $f=10\text{Hz}$	-	1.0	10	dB
	NF(2)	$V_{DS}=10\text{V}$, $I_D=1.0\text{mA}$, $R_g=1\text{k}\Omega$, $f=1\text{kHz}$	-	0.5	2	

Note: I_{DSS} Classification GR: 2.6~6.5, BL: 6.0~12, V: 10~20

STATIC CHARACTERISTICS



$I_D - V_{DS}$ (LOW VOLTAGE REGION)

