## SILICON N CHANNEL JUNCTION TYPE

LOW NOISE AUDIO AMPLIFIER APPLICATIONS.
DIFFERENTIAL AMPLIFIER APPLICATIONS.

## FEATURES:

- Recommended for first stages of EQ Amplifiers.
- High  $|y_{fs}|$ :  $|y_{fs}| = 22mS(Typ.)$

 $(V_{DS}=10V, V_{GS}=0, I_{DSS}=3mA)$ 

• Excellent Pair Characteristics

:  $|V_{GS1} - V_{GS2}| = 20 \text{mV}$  (Max.) ( $V_{DS} = 10 \text{V}$ ,  $I_D = 1 \text{mA}$ )

- $\bullet$  High Breakdown Voltage :  $\rm V_{GDS}\mbox{=-}40V$  (Min.)
- Low Noise

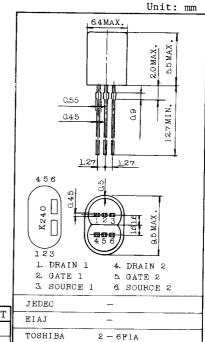
:  $e_n=0.95nV/\sqrt{Hz}$  (Typ.)

 $(V_{DS}=10V, I_{D}=1mA, f=1kHz)$ 

- High Input Impedance : IGSS=-lnA(Max.) (VGS=-30V)
- · Complementary to 2SJ75.

## MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Gate-Drain Voltage	$v_{ m GDS}$	-40	V
Gate Current	IG	10	mA
Drain Power Dissipation	PD	400×2	mW
Junction Temperature	Τį	125	°C
Storage Temperature Range	Tstg	-55 ~ 125	°C



Weight: 0.72 g

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current	IGSS	V <sub>GS</sub> =-30V, V <sub>DS</sub> =0	-	-	-1.0	
Gate-Drain Breakdown Voltage	V(BR)GDS	V <sub>DS</sub> =0, I <sub>G</sub> =-100μA	-40	-	-	v
Drain Current	IDSS(Note)	$V_{DS}=10V$ , $V_{GS}=0$	2.6		20	mA
Cate-Source Cut-off Voltage	VGS (OFF)	VDS=10V, ID=0.1μA	-0.2	_	-1.5	V
Forward Transfer Admittance	lyfsl	VDS=10V, VGS=0, f=1kHz	15	22	-	mS
Differential Gate-Source Voltage	$v_{GS1}-v_{GS2}$	V <sub>DS</sub> =10V, I <sub>D</sub> =1mA	_	_	20	mV
Input Capacitance	C <sub>iss</sub>	VDS=10V, VGS=0, f=1MHz	_	30	_	pF
Reverse Transfer Capacitance	Crss	V <sub>DG</sub> =10V, I =0, f=1MHz	1 -	6	_	pF
Noise Figure	NF(1)	$V_{DS}=10V$ , $I_{D}=1.0$ mA, $R_{g}=1$ k $\Omega$ , $f=10$ Hz	T -	1.0	10	
	NF(2)	V <sub>DS</sub> =10V, I <sub>D</sub> =1.0mA, R <sub>g</sub> =1kΩ, f=1kHz	-	0.5	2	dB

