



QNHCHIP

2SJ74

Product Specification

2SJ74

Silicon P Channel Junction Type



Description

- Recommended for first stages of EQ amplifiers and M.C. head amplifiers.
- High $|Y_{fs}|$: $|Y_{fs}| = 22 \text{ mS}$ (typ.)
($V_{DS} = -10 \text{ V}$, $V_{GS} = 0$, $I_{DSS} = -3 \text{ mA}$)
- Low noise: $E_n = 0.95 \text{ nV/Hz}^{1/2}$ (typ.)
($V_{DS} = -10 \text{ V}$, $I_D = -1 \text{ mA}$, $f = 1 \text{ kHz}$)
- High input impedance: $I_{GSS} = 1.0 \text{ nA}$ (max) ($V_{GS} = 25 \text{ V}$)
- Complimentary to 2SK170

Absolute Maximum Ratings

($T_A = 25^\circ\text{C}$)

Symbol	Characteristics	Rating	Unit
V_{GDS}	Gate-drain voltage	25	V
I_G	Gate current	-10	mA
P_D	Drain power dissipation	400	mW
T_j	Junction temperature	125	$^\circ\text{C}$
T_{stg}	Storage temperature range	-55~125	$^\circ\text{C}$



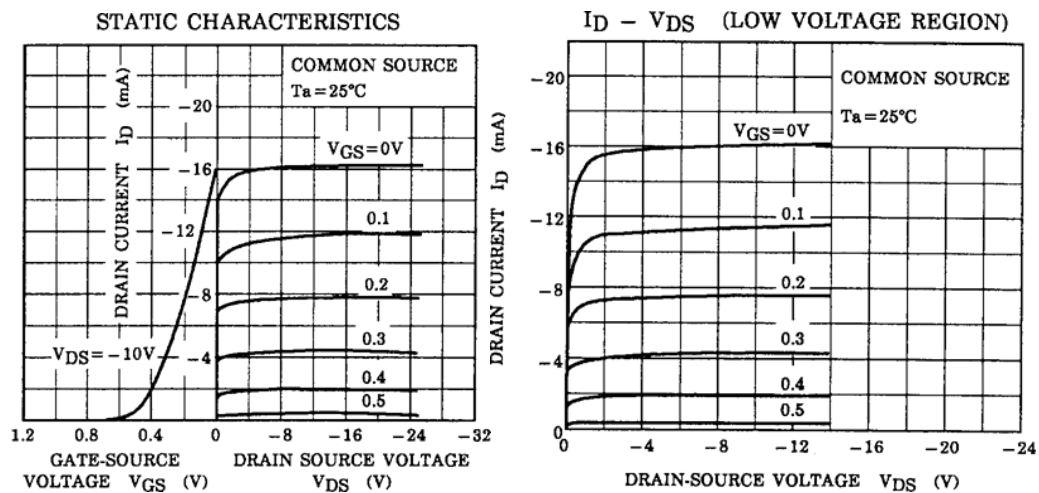
Electrical Characteristics

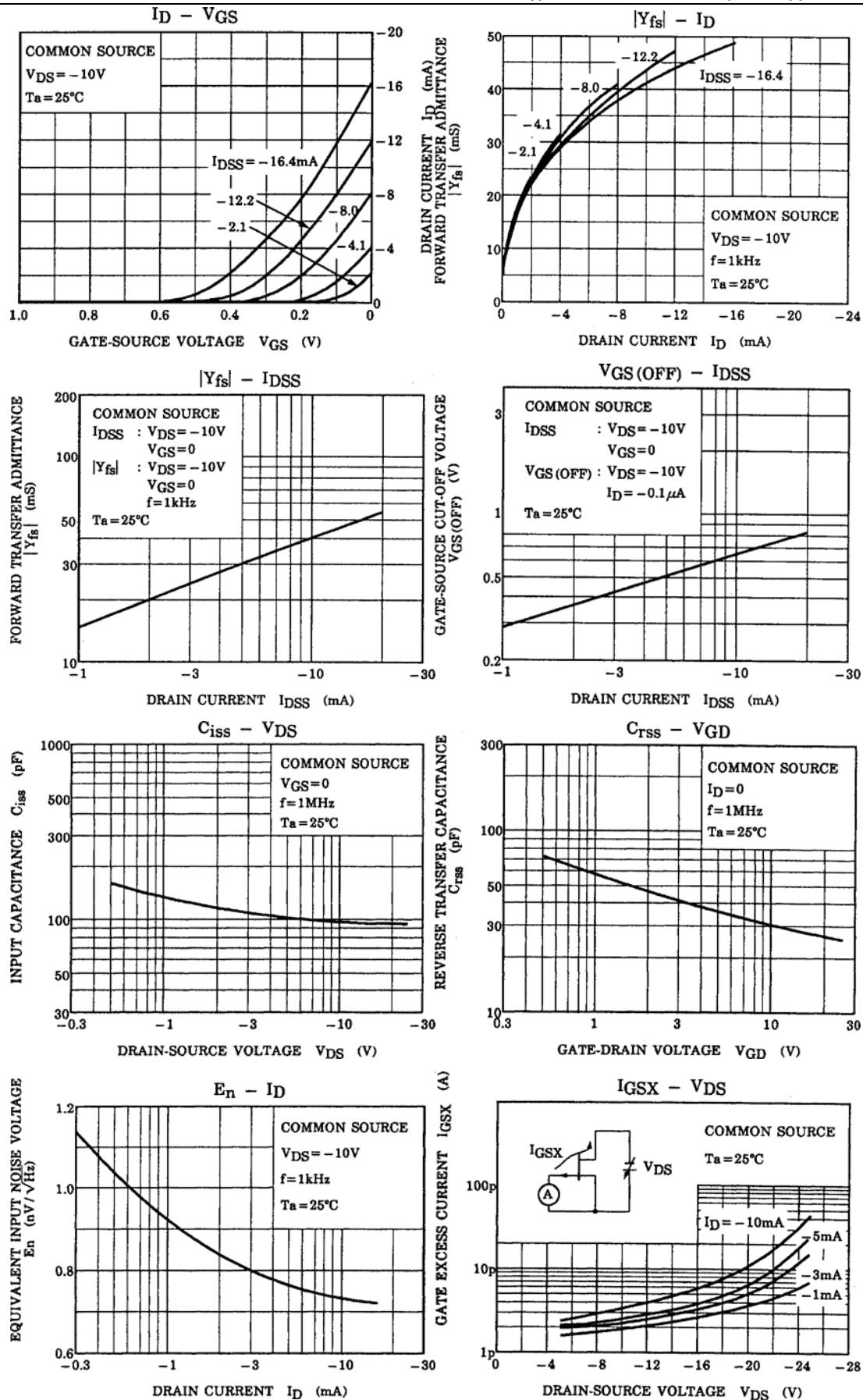
($T_A = 25^\circ\text{C}$)

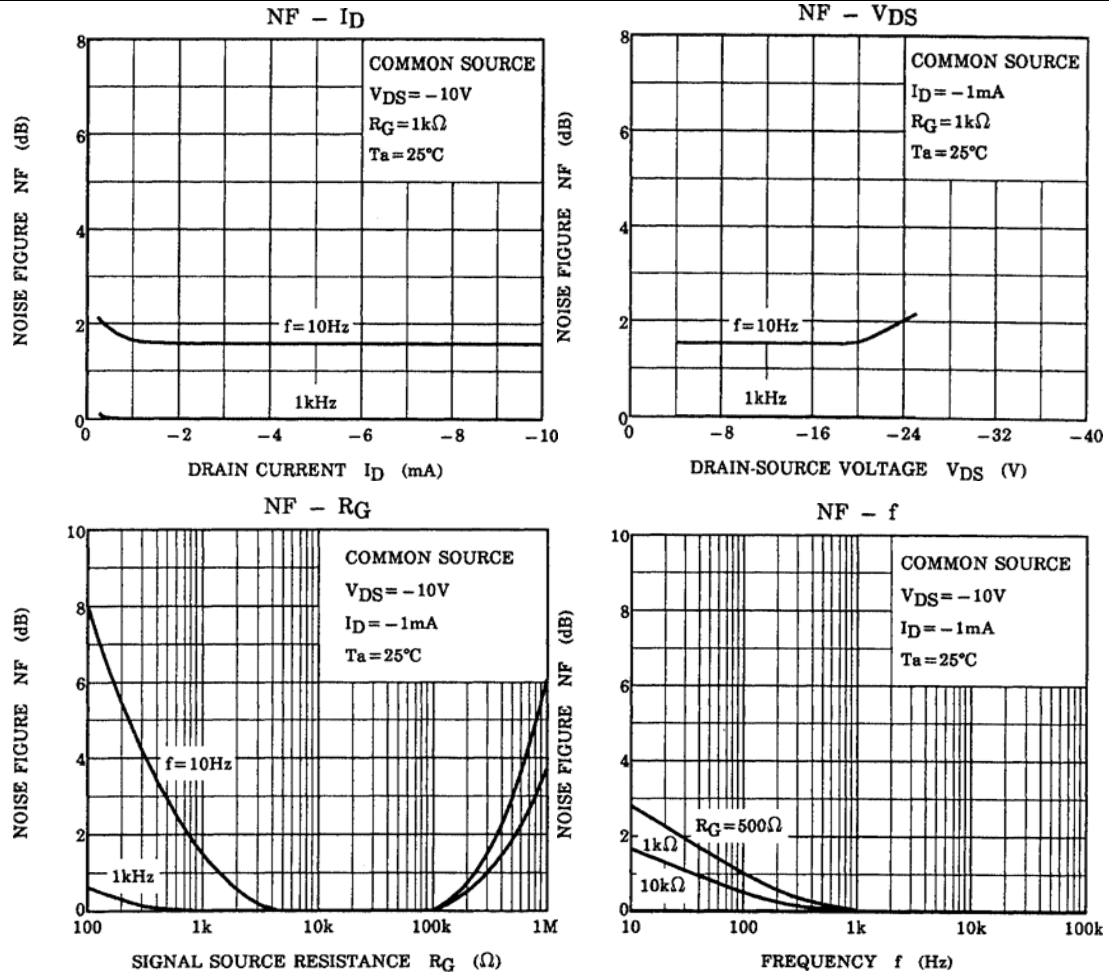
Symbol	Characteristics	Test Condition	Min	Typ.	Max	Unit
I_{GSS}	Gate cut-off current	$V_{GS} = 25\text{ V}, V_{DS} = 0$			1.0	nA
$V_{(BR)GDS}$	Gate-drain breakdown voltage	$V_{DS} = 0, I_G = 100\text{ }\mu\text{A}$	25			V
$I_{DSS(\text{Note})}$	Drain current	$V_{DS} = -10\text{ V}, V_{GS} = 0$	-2.6		-20	mA
$V_{GS(\text{OFF})}$	Gate-source cut-off voltage	$V_{DS} = -10\text{ V}, I_D = -0.1\text{ }\mu\text{A}$	0.15		2.0	V
/Yfs/	Forward transfer admittance	$V_{DS} = -10\text{ V}, V_{GS} = 0,$ $f = 1\text{ kHz}$	8	22		mS
C_{iss}	Input capacitance	$V_{DS} = -10\text{ V}, V_{GS} = 0,$ $f = 1\text{ MHz}$		105		pF
C_{rss}	Reverse transfer capacitance	$V_{DG} = -10\text{ V}, I_D = 0,$ $f = 1\text{ MHz}$		32		pF
NF (1)	Noise figure	$V_{DS} = -10\text{ V}, I_D = -1\text{ mA},$ $R_G = 1\text{ k}\Omega, f = 10\text{ Hz}$		1.0	10	dB
NG (2)		$V_{DS} = -10\text{ V}, I_D = -1\text{ mA},$ $R_G = 1\text{ k}\Omega, f = 1\text{ kHz}$		0.5	2	

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

Typical Application Circuit

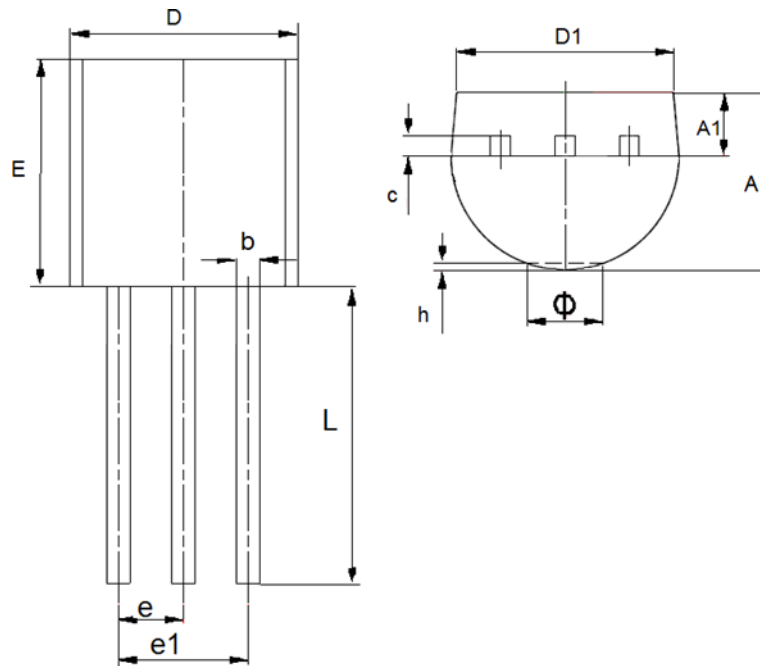








Packaging Information



参数	尺寸 (mm)		尺寸 (Inch)	
	最小值	最大值	最小值	最大值
A	3.3	3.7	0.1299	0.1457
A1	1.1	1.4	0.0433	0.0551
b	0.38	0.55	0.015	0.0217
c	0.36	0.51	0.0142	0.0201
D	4.3	4.7	0.1693	0.185
D1	3.43	—	0.135	—
E	4.3	4.7	0.1693	0.185
e	1.27		0.05	
e1	2.44	2.64	0.0961	0.1039
L	14.1	14.5	0.5551	0.5709
h	0	0.38	0	0.015
Φ	—	1.6	—	0.063

Ordering information

Order Code	I _{DSS} (mA)	Package Type	Minimum Packing QTY	Belivery Mode
2SJ74-GR	-2.6~-6.5	TO-92	3000	Tape & Reel
2SJ74-BL	-6.0~-12	TO-92	3000	Tape & Reel