

# 2SK436

### Applications

- AM tuner RF amps and low-noise amps.

### Features

- Large  $|Y_{fs}|$ .
- Ultralow noise figure.
- Small  $C_{rss}$ .
- Ultrasmall-sized package permitting 2SK436-applied sets to be made small and slim.

### Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

			unit
Drain-to-Source Voltage	$V_{DSS}$	15	V
Gate-to-Drain Voltage	$V_{GDS}$	-15	V
Gate Current	$I_G$	10	mA
Drain Current	$I_D$	20	mA
Allowable Power Dissipation	$P_D$	150	mW
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

### Electrical Characteristics at $T_a = 25^\circ\text{C}$

			min	typ	max	unit
G-D Breakdown Voltage	$V_{(BR)/GDS}$	$I_G = -10\mu\text{A}, V_{DS} = 0$	-15			V
Gate Cutoff Current	$I_{GSS}$	$V_{GS} = -10\text{V}, V_{DS} = 0$			-1.0	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 5\text{V}, I_D = 100\mu\text{A}$		-0.5	-1.5	V
Drain Current	$I_{DSS}$	$V_{DS} = 5\text{V}, V_{GS} = 0$	1.2*		12.0*	mA
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = 5\text{V}, V_{GS} = 0, f = 1\text{kHz}$	8.0	17		mS
Input Capacitance	$C_{iss}$	$V_{DS} = 5\text{V}, V_{GS} = 0, f = 1\text{MHz}$		7.0		pF
Reverse Transfer Capacitance	$C_{rss}$	$V_{DS} = 5\text{V}, V_{GS} = 0, f = 1\text{MHz}$		2.0		pF
Noise Figure	NF	$V_{DS} = 5\text{V}, I_D = 1\text{mA}, R_g = 1\text{k}\Omega, f = 1\text{kHz}$		1.5		dB

\* : The 2SK436 is classified by  $I_{DSS}$  as follows : (unit : mA)

1.2	17	2.1	1.7	18	3.0	2.5	19	4.2
3.5	20	6.0	5.0	21	8.5	7.3	22	12.0

Note) Marking : A

$I_{DSS}$  rank : 17, 18, 19, 20, 21, 22

### Package Dimensions 2050A

(unit : mm)

