HITACHI

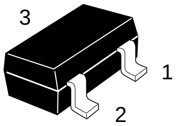
2SK1479

Silicon N Channel Junction FET
Low Frequency Impedance Converter

Features

- Small input capacitance. (Ciss = 3.2 pF typ.)
- High $|y_{fs}|$, small power loss. ($|y_{fs}|$ 3.5 mS typ.)
- Suitable for electric condencer Mic impedance converter.

MPAK



1. Drain
2. Source
3. Gate

Table 1 Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Rating	Unit
Gate to drain voltage	V_{GDO}	–25	V
Gate to source voltage	V_{GSO}	–25	V
Drain current	I_D	5	mA
Gate current	I_G	5	mA
Channel power dissipation	Pch	100	mW
Channel temperature	Tch	150	°C
Storage temperature	Tstg	–55 to +150	°C

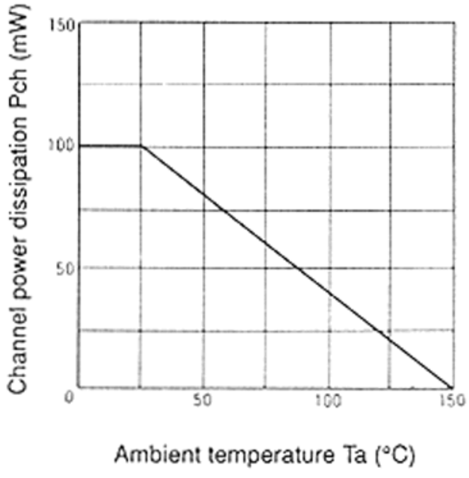
Table 2 Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test condition
Gate cutoff current	I_{GSS}	—	—	–1	nA	V_{GS} = –10 V, V_{DS} = 0
Gate to source breakdown voltage	$V_{(BR)GSS}$	–20	—	—	V	I_G = –10 µA, V_{DS} = 0
Drain current	I_{DSS}*	300	—	1400	µA	V_{DS} = 3 V, V_{GS} = 0
Gate to source cutoff voltage	$V_{GS(off)}$	0	—	–0.8	V	V_{DS} = 3 V, I_D = 1 µA
Forward transfer admittance	$\lvert y_{fs} \rvert$	2.0	3.5	—	mS	V_{DS} = 3 V, V_{GS} = 0, f = 1 kHz
Input capacitance	Ciss	—	3.2	—	pF	V_{DS} = 3 V, V_{GS} = 0, f = 1 MHz
Reverse transfer capacitance	Crss	—	1.2	—	pF	V_{DS} = 3 V, V_{GS} = 0, f = 1 MHz

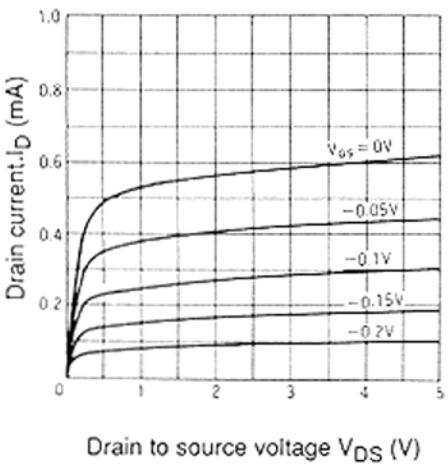
* The 2SK1479 is grouped by I_{DSS} as follows.

Grade	A	B
Mark	XLA	XLB
I_{DSS} (µA)	300 to 800	600 to 1400

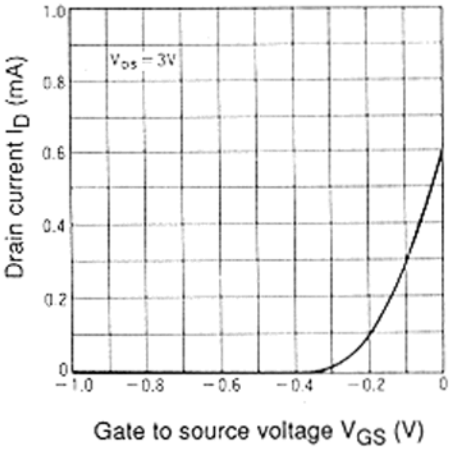
Maximum channel dissipation curve



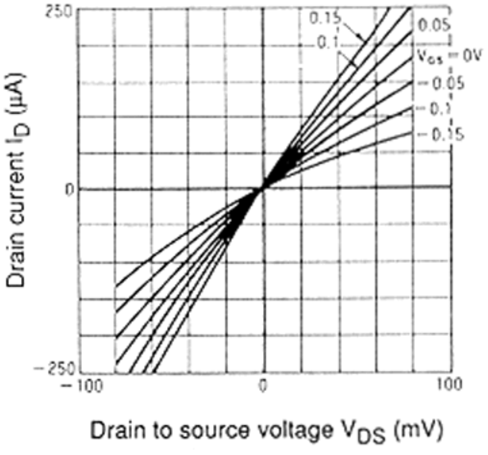
Typical output characteristics (1)



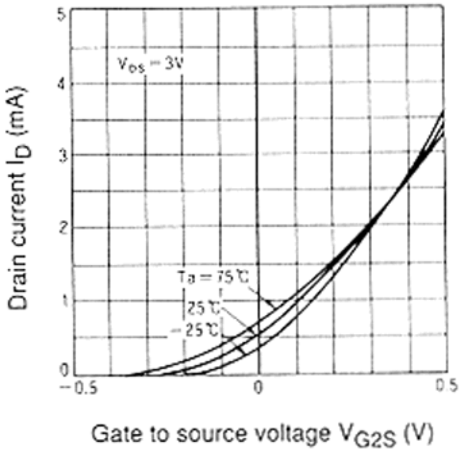
Typical transfer characteristics (1)



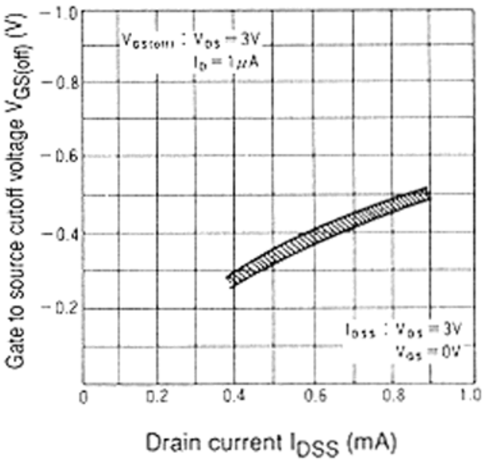
Typical output characteristics (2)

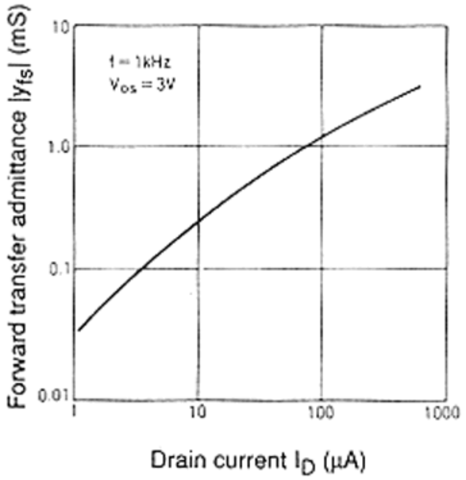


Typical transfer characteristics (2)

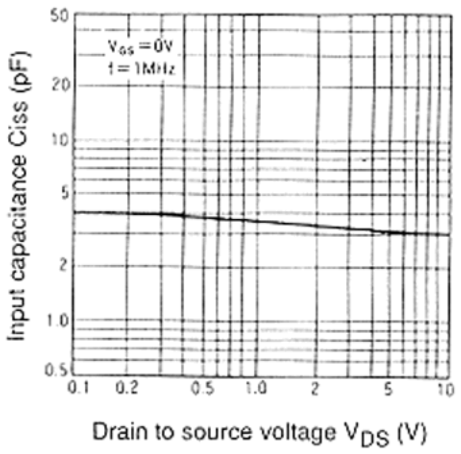


Gate to source cutoff voltage
vs. drain current

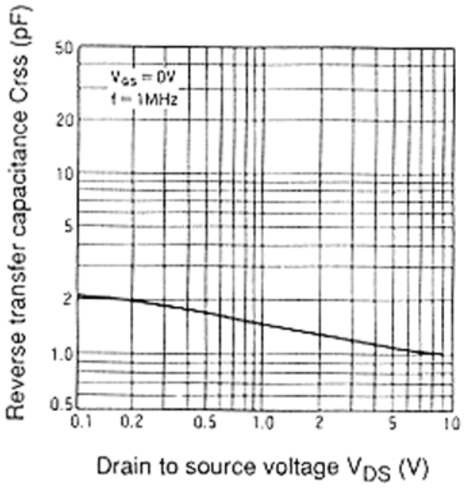




Forword transfer admittance
vs. drain current



Input capacitance
vs. drain to source voltage



Reverse transfer capacitance
vs. drain to source voltage