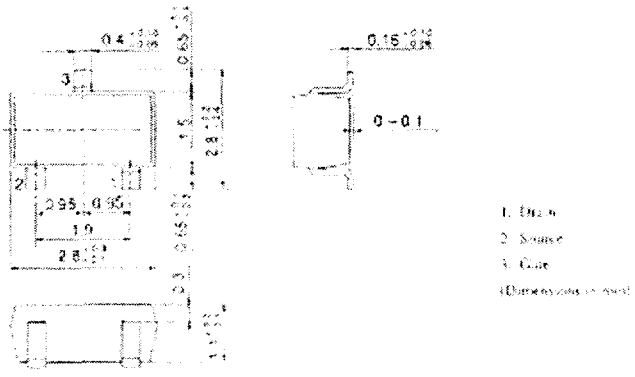
HITACHI

2SK1070

SILICON N-CHANNEL JUNCTION FET

LOW FREQUENCY/HIGH FREQUENCY AMPLIFIER

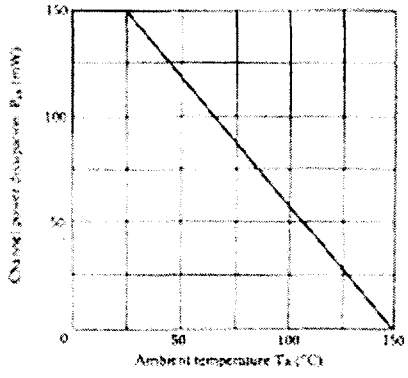


(MPAK)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SK1070	Unit
Gate to drain voltage	V_{GDO}	−22	V
Gate to source voltage	V_{GSO}	−22	V
Drain current	I_D	50	mA
Gate current	I_G	10	mA
Channel power dissipation	P_{ch}	150	mW
Channel temperature	T_{ch}	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

MAXIMUM CHANNEL DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Gate cutoff current	I_{GSS}	V_{GS} = −15V, V_{DS} = 0	—	—	−10	nA
Gate to source breakdown voltage	$V_{(BR)GSS}$	I_G = −10μA, V_{DS} = 0	−22	—	—	V
Drain current	I_{DSS}*	V_{DS} = 5V, V_{GS} = 0, Pulse Test	6	—	40	mA
Gate to source cutoff voltage	$V_{GS(off)}$	V_{DS} = 5V, I_D = 10μA	0	—	−2.5	V
Forward transfer admittance	$\lvert y_{fs} \rvert$	V_{DS} = 5V, V_{GS} = 0, f = 1kHz	20	30	—	mS
Input capacitance	C_{iss}	V_{DS} = 5V, V_{GS} = 0, f = 1MHz	—	9	—	pF

* The 2SK1070 is grouped by I_{DSS} as follows.

Grade	B	C	D	E
Mark	PTB	PTC	PTD	PTE
I_{DSS}	6 to 14	12 to 22	18 to 30	27 to 40

■ See characteristic curves of 2SK435.