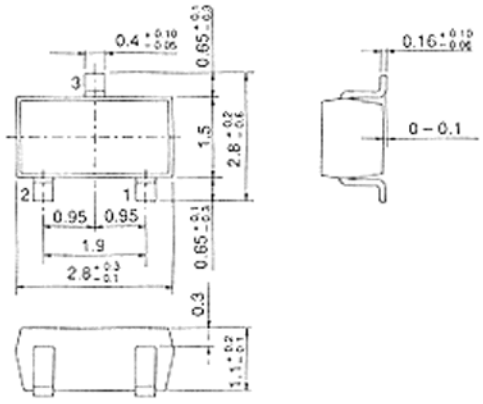
HITACHI

2SK197

SILICON N-CHANNEL JUNCTION FET

VHF AMPLIFIER, MIXER



1. Gate
2. Drain
3. Source

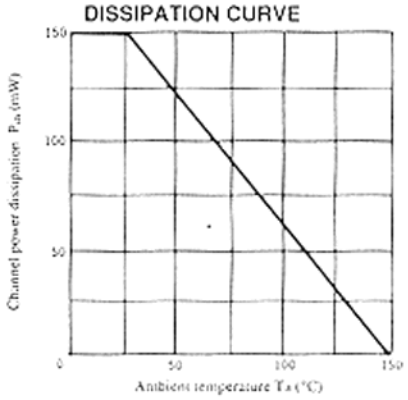
(Dimensions in mm)

(MPAK)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SK197	Unit
Gate to drain voltage	V_{GDO}	−18	V
Drain current	I_D	20	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 POWER DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Gate to drain breakdown voltage	$V_{(BR)GDO}$	I_G = −100μA, I_S = 0	−18	—	—	V
Gate cutoff current	I_{GSS}	V_{GS} = −0.5V, V_{DS} = 0	—	—	−10	nA
Gate to source cutoff voltage	$V_{GS(off)}$	V_{DS} = 10V, I_D = 10μA	−0.3	—	−4.0	V
Drain current	I_{DSS}*	V_{DS} = 10V, V_{GS} = 0	2	—	14	mA
Forward transfer admittance	$\lvert y_{fs} \rvert$	V_{DS} = 10V, V_{GS} = 0, f = 1kHz	3.0	8.0	—	mS
Input capacitance	C_{iss}	V_{DS} = 10V, V_{GS} = 0, f = 1MHz	—	3.4	—	pF
Reverse transfer capacitance	C_{rss}	V_{DS} = 10V, V_{GS} = 0, f = 1MHz	—	0.38	—	pF

* The 2SK197 is grouped by I_{DSS} as follows.

Grade	C	D	E
Mark	YC	YD	YE
I_{DSS}	2 to 5	3 to 7	6 to 14

■ See characteristic curves of 2SK55.