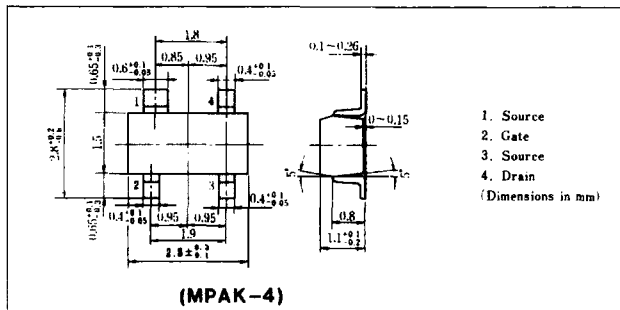


2SK668

N-Channel GaAs Single Gate MES FET
UHF/SHF Low Noise Amplifier

■ OUTLINE DRAWING

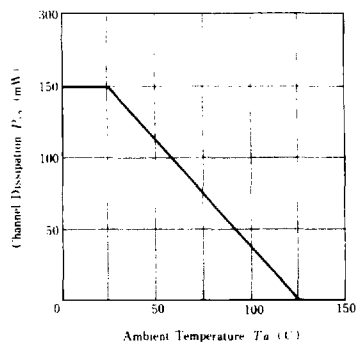


■ ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

Item	Symbol	Ratings	Unit
Drain to Source Voltage	V_{DS}	6	V
Gate to Source Voltage	V_{GS}	+0.5 -6.0	V
Drain Current	I_D	100	mA
Channel Dissipation	P_{ch}	150	mW
Channel Temperature	T_{ch}	125	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

The absolute maximum ratings are limiting values, to be applied individually, beyond which the device may be permanently damaged. Functional operation under any of these conditions is not guaranteed. Exposing a circuit to its absolute maximum rating for extended periods of time may affect the device's reliability.

MAXIMUM CHANNEL DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Drain Cutoff Current	I_{DSX}	$V_{DS} = 6\text{V}, V_{GS} = -4\text{V}$	—	—	50	μA
Gate to Source Leakage Current	I_{GSS}	$V_{GS} = -6\text{V}, V_{DS} = 0$	—	—	10	μA
Drain Current	I_{DSS}	$V_{DS} = 5\text{V}, V_{GS} = 0$, Pulse Test	20	—	100	mA
Gate to Source Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 5\text{V}, I_D = 100\text{ }\mu\text{A}$	—	—	-5	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = 5\text{V}, I_D = 20\text{ mA}, f = 1\text{ kHz}$	15	35	—	mS
Power Gain	PG	$V_{DS} = 4\text{V}, I_D = 20\text{ mA}, f = 3\text{ GHz}$	8	10	—	dB
Noise Figure	NF	$V_{DS} = 4\text{V}, I_D = 20\text{ mA}, f = 3\text{ GHz}$	—	2.5	3.5	dB

* Marking is "IU"

See characteristic curves of 2SK457

