2SK23A

**Silicon N-Channel Junction FET**

- 汎用 DC-to-VHF Use, Low Noise, High Reliability
- Economical Type: 2SK107
- Dual Type: 2SK58

絶対最大定格 Absolute Maximum Ratings $T_a = 25°C$

Characteristics	Symbol	2SK23A-8	2SK23A-9
Drain-to-Gate Voltage	V_{DGO}	27 V	40 V
Source-to-Gate Voltage	V_{SGO}	9 V	
Drain Current	I_D	20 mA	
Gate Current	I_G	10 mA	
Power Dissipation	P	250 mW	
Junction Temperature	T_J	100°C	
Storage Temperature	T_{stg}	−30～+120°C	

1. Source
2. Gate
3. Drain
Unit: mm
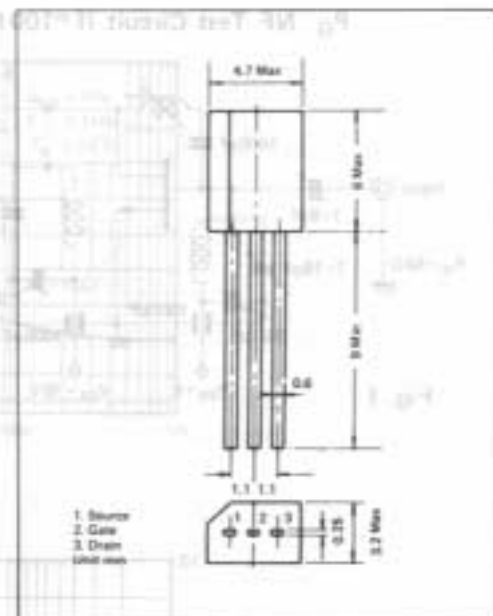
電気的特性 Electrical Characteristics $T_a = 25°C$

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Source-to-Gate Voltage	V_{SGO}	$I_{SG} = 10\mu A$	9			V
Gate Cutoff Current	I_{GSS}	$V_{GS} = -6V$, $V_{DS} = 0$		−0.05	−10	nA
Drain Saturation Current	I_{DSS}	$V_{DS} = 10V$, $V_{GS} = 0$	2.7		12.1	mA
Pinch-off Voltage	V_p	$V_{DS} = 10V$, $I_D = 30\mu A$	−0.45		−3.85	V
Forward Transfer Conductance	g_m	$V_{DS} = 10V$, $V_{GS} = 0$, $f = 1kHz$	2.7			m℧
Input Impedance Y11S	r_p	$V_{DS} = 10V$, $V_{GS} = 0$, $f = 100MHz$		8		kΩ
	C_p			5		pF
Output Impedance Y22S	r_p	$V_{DS} = 10V$, $V_{GS} = 0$, $f = 100MHz$		20		kΩ
	C_p			2		pF
Reverse Transfer Capacitance	C_{dg}	$V_{DS} = 10V$, $f = 1MHz$		1.8		pF
Input Noise Voltage	e	$V_{DS} = 10V$, $V_{GS} = 0$,		13		nV/Hz½
Noise Figure	NF	$R_g = 10k\Omega$, $f = 1kHz$		0.1		dB
Power Gain	P_G	$V_{DS} = 10V$, $V_{GS} = 0$,		18		dB
Noise Figure	NF	$f = 100MHz$, Fig. 1		2		dB

規格細分 Classifications

Rank		I_{DSS} ($V_{DS} = 10V$, $V_{GS} = 0$)	$-V_p$ ($V_{DS} = 10V$, $I_D = 30\mu A$)
2SK23A-8/9	2	2.7－ 5.5	−2.42
	3	4.5－ 7.7	−2.75
	4	6.3－ 9.9	−3.30
	5	8.1－12.1	−3.85