

No.2749

2SK1069

N-Channel Junction Silicon FET

Low-Frequency

General-Purpose Amp Applications

## **Applications**

- · Low-frequency general-purpose amplifiers
- · Ideal for use in variable resistors, analog switches, low-frequency amplifiers, and constant-current circuits

## **Features**

- · Adoption of FBET process
- · Very small-sized package permitting 2SK1069-applied sets to be made smaller and slimmer

Absolute Maximum Ratings at Ta = 25°C			unit
Drain to Source Voltage	$V_{DSX}$	40	V
Gate to Drain Voltage	$V_{GDS}$	40	V
Gate Current	$I_{\mathbf{G}}$	10	mΑ
Drain Current	$I_{\mathbf{D}}$	20	mΑ
Allowable Power Dissipation	$P_{D}$	150	$\mathbf{m}\mathbf{W}$
Junction Temperature	$T_{\mathbf{j}}$	150	°C
Storage Temperature	Tstg	-55  to  +150	°C

Electrical Characteristics at Ta = 25°C			min	typ max	unit
Gate to Drain Breakdown Voltage	V <sub>(BR)GDS</sub>	$I_G = -10 \mu A, V_{DS} = 0$	40		V
Gate Cutoff Current	IGSS	$V_{GS} = -20V, V_{DS} = 0$		-1.0	nА
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1\mu A$	-0.3	-0.9 -2.0	V
Drain Current	$I_{DSS}$	$V_{DS}=10V, V_{GS}=0$	*1.2	<b>%12.0</b>	mA
Forward Transfer Admittance	ly <sub>fs</sub> l	$V_{DS} = 10V, V_{GS} = 0, f = 1kHz$	4.5	9.0	mS
Input Capacitance	$c_{iss}$	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		9.0	рF
Reverse Transfer Capacitance	$c_{rss}$	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		2.1	рF
Noise Figure	NF	$V_{DS} = 10V, Rg = 1k\Omega,$		1.5	ďΒ
		$I_D = 1 \text{mA}, f = 1 \text{kHz}$			

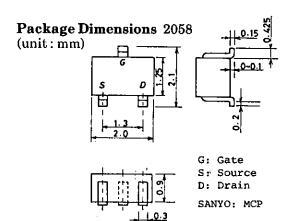
\*: The 2SK1069 is classified by IDSS as follows (unit: mA):

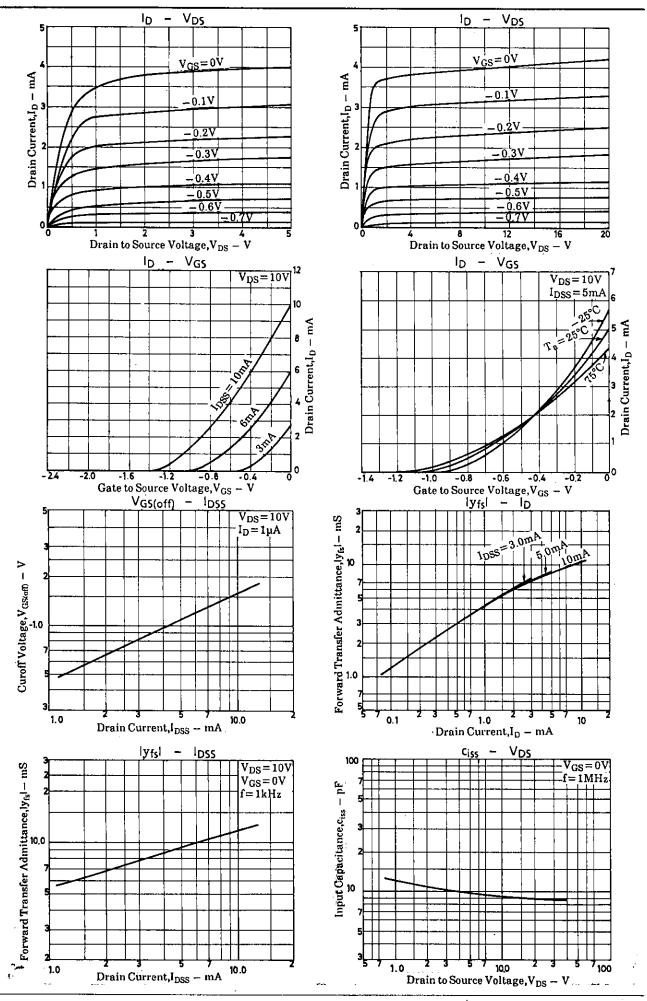
1.2 3 3.0	2.5 4 6.0	5.0 5 12.0
1.2 0 0.0	2.0 4 0.0	0.0 0 12.0

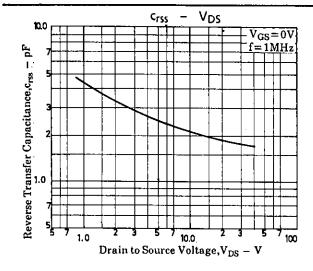
(Note) Marking: FJ

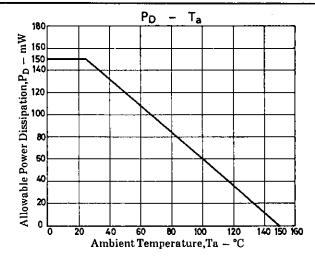
I<sub>DSS</sub> rank: 3,4,5

•For CP package version, use the 2SK771.









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