Ordering number:EN2748

N-Channel Junction Silicon FET

2SK1068

Impedance Conversion Applications

Applications

- Impedance conversion.
- Infrared sensor.

Features

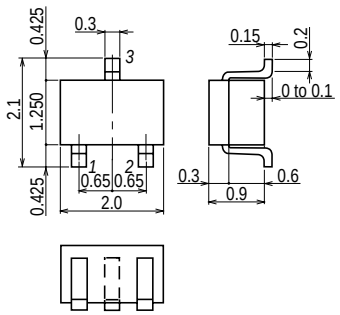
- Small I_{GSS}.
- Small Crss.
- Ultrasmall-sized package permitting 2SK1068-applied sets to be made smaller and slimmer.

Package Dimensions

unit:mm

2058

[2SK1068]



1 : Source
2 : Drain
3 : Gate
SANYO : MCP

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSX}		40	V
Gate-to-Drain Voltage	V_{GDS}		–40	V
Gate Current	I_G		10	mA
Drain Current	I_D		1	mA
Allowable Power Dissipation	P_D		100	mW
Junction Temperature	Tj		150	˚C
Storage Temperature	Tstg		–55 to +150	˚C

Electrical Characteristics at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	$V_{(BR)GDS}$	I_G=–10μA, V_{DS}=0	–40			V
Gate-to-Source Leakage Current	I_{GSS}	V_{GS}=–20V, V_{DS}=0			–500	pA
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=10V, V_{GS}=0	30*		300*	μA
Cutoff Voltage	$V_{GS(off)}$	V_{DS}=10V, I_D=1μA	–0.4	–1.5	–4.0	V
Forward Transfer Admittance	| yfs |	V_{DS}=10V, V_{GS}=0, f=1kHz	0.05	0.13		mS

* : The 2SK1068 is classified by I_{DSS} as follows (unit : μA) :

30	10	80	60	11	180	150	12	300

Continued on next page.

(Note) Marking : B
I_{DSS} rank : 10, 11, 12
• For CP package version, use the 2SK545.

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Parameter	Symbol	Conditions	Ratings			Unit
Input Capacitance	Ciss	V_{DS}=10V, V_{GS}=0, f=1MHz		1.7		pF
Reverse Transfer Capacitance	Crss	V_{DS}=10V, V_{GS}=0, f=1MHz		0.7		pF