

No.1789B

N-Channel Junction Silicon FET

Impedance Converter Applications

Applications

- · Impedance converter applications.
- · Infrared sensor.

Features

- \cdot Small I_{GSS}.
- · Small Ciss.
- $\cdot \ Ultracompact\ package\ permitting\ 2SK545-applied\ sets\ to\ be\ compact.$

Absolute Maximum Ratings	at $Ta = 25$ °C	•	unit
Drain-to-Source Voltage	$ m V_{DSS}$	40	V
Gate-to-Drain Voltage	$ m V_{GDS}^{-0.5}$	-40	V
Gate Current	I_G	10	mA
Drain Current	I_{D}^{-}	1	mA
Power Dissipation	$ m P_D$	125	mW
Junction Temperature	$\mathbf{T_{i}^{r}}$	125	°C
Storage Temperature	Tstg	-55 to +125	°C

Ų,	lectrical Characteristics at Ta =	25°C		min	ty	p r	max	unit
	Gate-to-Drain	$V_{(BR)GDS}$	$I_D = -10 \mu A, V_{DS} = 0$	-40	•			V
	Breakdown Voltage	(-10,020	2 1 2 20					·
	Gate-to-Source	I_{GSS}	$V_{GS} = -20V, V_{DS} = 0$			-5	00	рA
	Leakage Current		. 25			_	- •	P
	Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1\mu A$		-1.5	4	4.0	V
	Drain Current	IDSS	$V_{DS} = 10V, V_{GS} = 0$	30%	(3	00%	иA
	Forward Transfer Admittance	У _{fs}	$V_{DS} = 10V, V_{GS} = 0, f = 1kHz$	0.05	0.13			mS
	Input Capacitance	Ciss	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		1.7			рF
	Reverse Transfer Capacitance	Crss	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		0.7			рF
	•		·					-

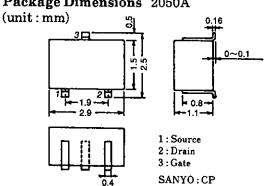
 $\mbox{\em \%}$ The 2SK545 is classified by $I_{\mbox{\footnotesize DSS}}$ as follows (unit : $\mbox{$\muA})$:

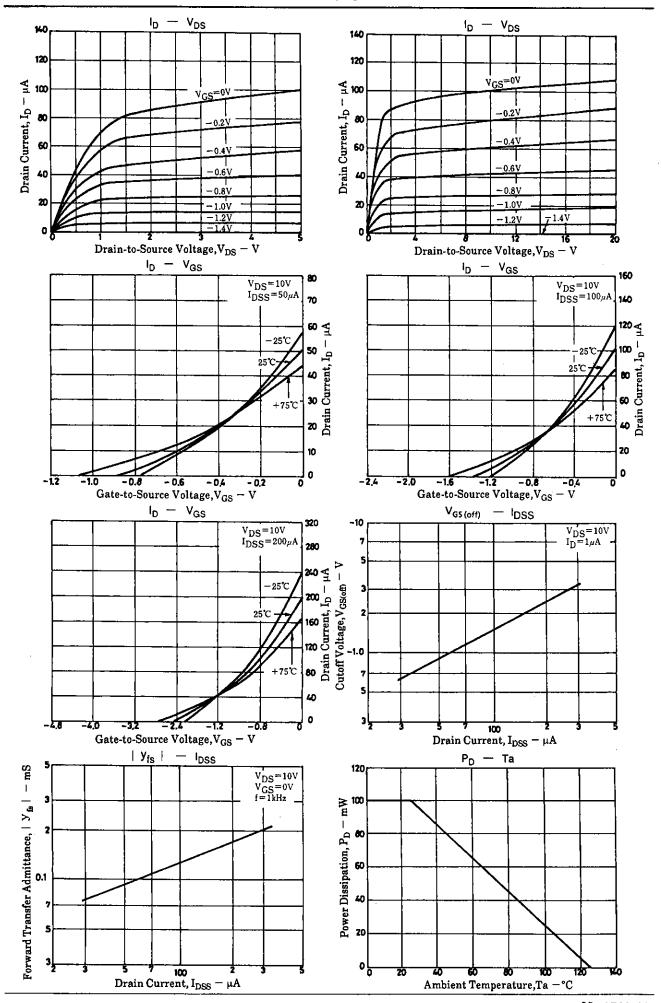
30	10	80	60	11	180	150	12	300
			_					

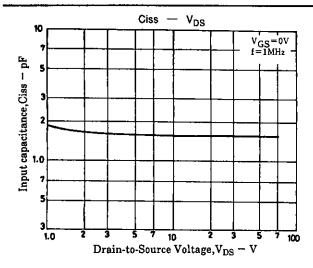
(Note) Marking: B

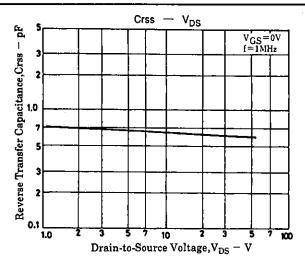
 I_{DSS} rank: 10, 11, 12

Package Dimensions 2050A









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