

<b>SANYO</b>	No.1790B	2SK546
		N-Channel Junction Silicon FET

Impedance Converter Applications

**Applications**

- Impedance conversion
- Infrared sensor

**Features**

- Low  $I_{GSS}$
- Small  $c_{iss}$

**Absolute Maximum Ratings at  $T_a=25^\circ\text{C}$**

			unit
Drain to Source Voltage	$V_{DSS}$	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	$T_j$	125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

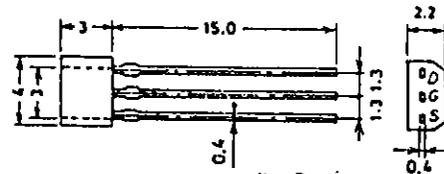
**Electrical Characteristics at  $T_a=25^\circ\text{C}$**

			min	typ	max	unit
Gate to Drain Breakdown Voltage	$V(BR)_{GDS}$	$I_G=-10\mu\text{A}, V_{DS}=0$	-40			V
Gate Cutoff Current	$I_{GSS}$	$V_{GS}=-20\text{V}, V_{DS}=0$			-500	pA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS}=10\text{V}, I_D=1\mu\text{A}$	-1.5	-4.0		V
Drain Current	$I_{DSS}$	$V_{DS}=10\text{V}, V_{GS}=0$	30*		300*	$\mu\text{A}$
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS}=10\text{V}, V_{GS}=0, f=1\text{KHz}$	0.05	0.13		mS
Input Capacitance	$c_{iss}$	$V_{DS}=10\text{V}, V_{GS}=0, f=1\text{MHz}$		1.9		pF
Reverse Transfer Capacitance	$c_{rss}$	$V_{DS}=10\text{V}, V_{GS}=0, f=1\text{MHz}$		0.7		pF

\* The 2SK546 is classified by  $I_{DSS}$  as follows (unit:  $\mu\text{A}$ ):

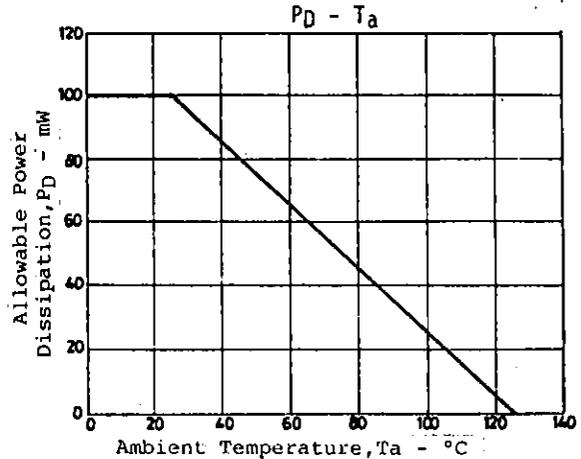
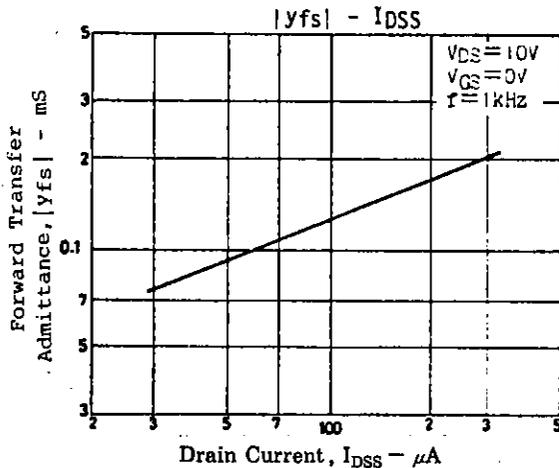
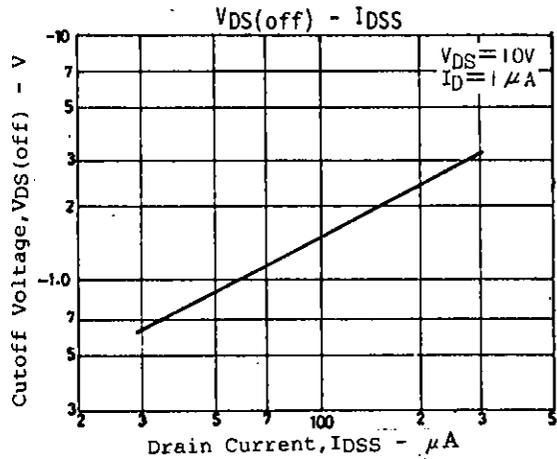
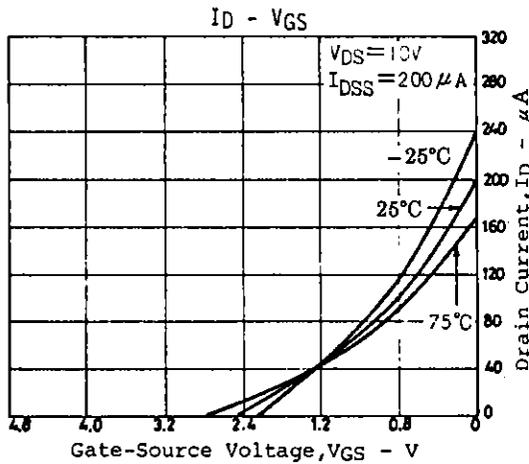
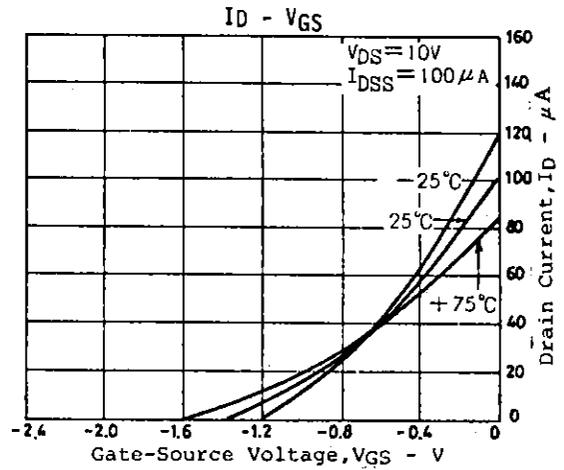
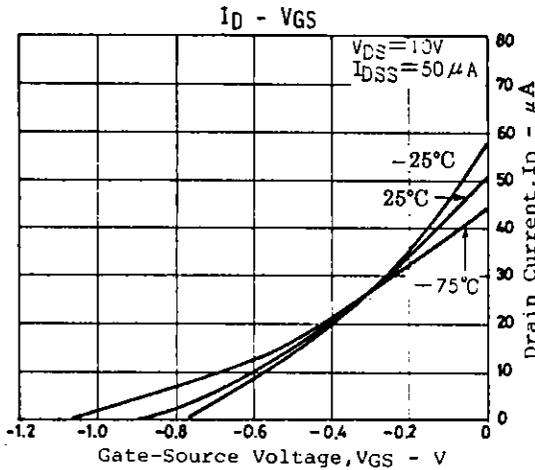
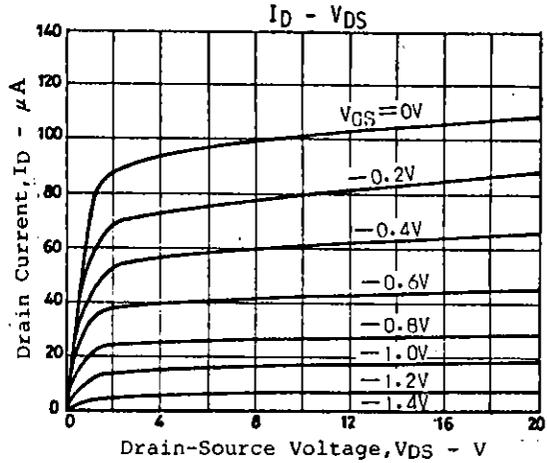
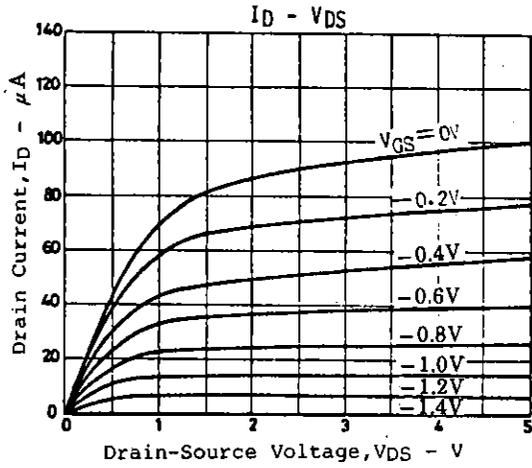
30	I	80	60	J	180	150	K	300
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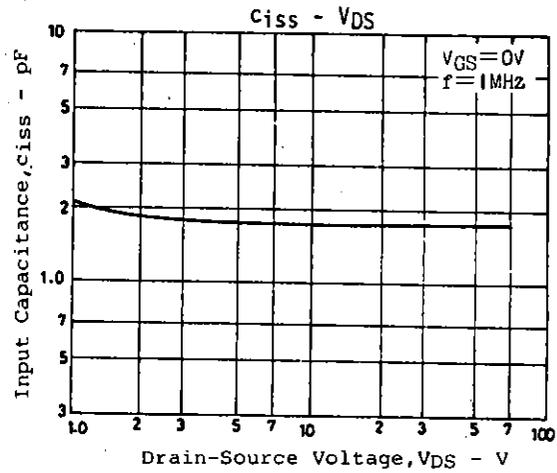
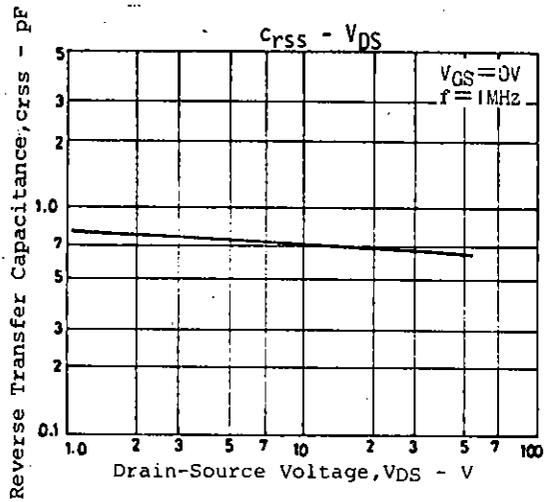
**Package Dimensions 2034**  
(unit: mm)



D: Drain  
G: Gate  
S: Source

SANYO: SPA





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