

<b>SANYO</b>	No.1793B	<b>2SK583</b>
		N-Channel Enhancement MOS Silicon FET

## Analog Switch Applications

**Applications**

- . Analog switches, low-pass filters

**Features**

- . Large  $|y_{fs}|$
- . Enhancement type
- . Small ON-resistance

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

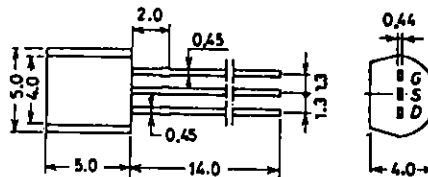
			unit
Drain to Source Voltage	$V_{DS}$	50	V
Gate to Source Voltage	$V_{GS}$	$\pm 12$	V
Drain Current	$I_D$	200	mA
Drain Current (Pulse)	$I_{DP}$	300	mA
Allowable Power Dissipation	$P_D$	600	mW
Channel Temperature	$T_{ch}$	125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

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

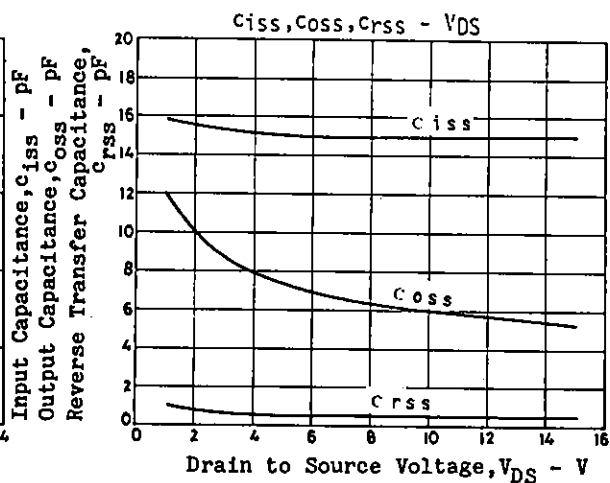
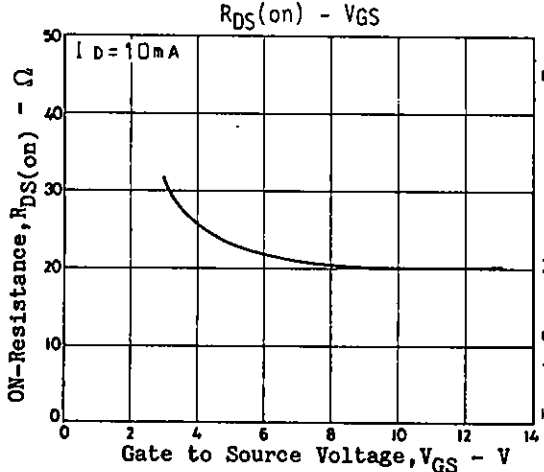
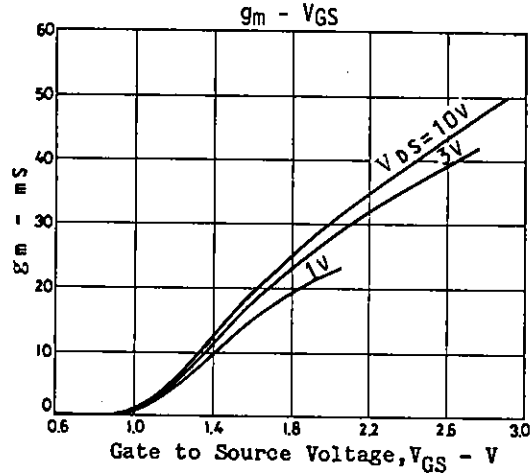
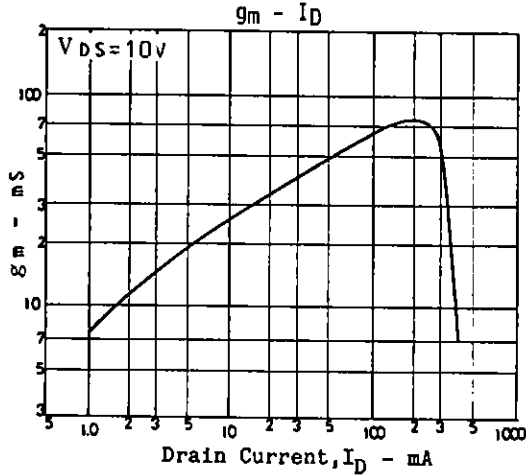
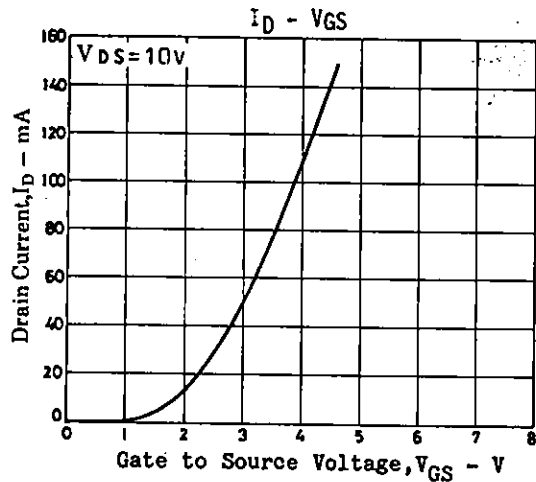
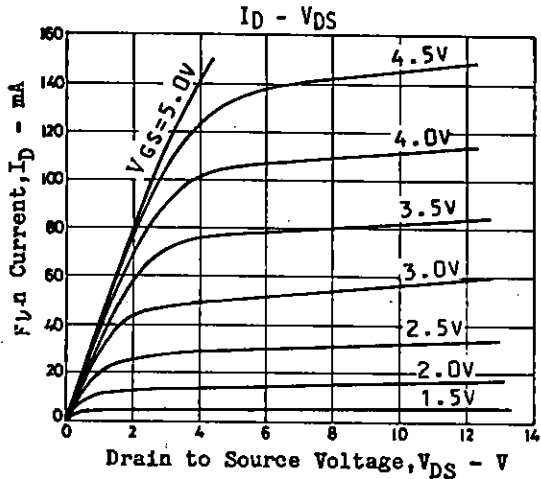
			min	typ	max	unit
Drain to Source Voltage	$V_{(BR)DS}$	$I_D=10\mu\text{A}, V_{GS}=0\text{V}$	50			V
Gate Cutoff Current	$I_{GSS}$	$V_{GS}=10\text{V}, V_{DS}=0\text{V}$		0.01	10	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS}=10\text{V}, I_D=100\mu\text{A}$	0.3	0.9	1.5	V
Drain Current	$I_{DSS}$	$V_{DS}=20\text{V}, V_{GS}=0\text{V}$			1	$\mu\text{A}$
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=10\text{V}, I_D=50\text{mA}, f=1\text{kHz}$	25	40		mS
Input Capacitance	$c_{iss}$	$V_{DS}=10\text{V}, V_{GS}=0, f=1\text{MHz}$		15		pF
Output Capacitance	$c_{oss}$	$V_{DS}=10\text{V}, V_{GS}=0, f=1\text{MHz}$		6		pF
Reverse Transfer Capacitance	$c_{rss}$	$V_{DS}=10\text{V}, V_{GS}=0, f=1\text{MHz}$		0.5		pF
ON-Resistance	$r_{DS(on)}$	$V_{GS}=10\text{V}, I_D=10\text{mA}$		20		$\Omega$

**Package Dimensions 2005A**

(unit: mm)



JEDEC: TO-92      G: Gate  
 EIAJ : SC-43      S: Source  
 SANYO: NP        D: Drain



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