

<b>SANYO</b>	No.2563C	<b>2SK669</b>
		N-Channel Enhancement MOS Silicon FET Very High-Speed Switch, Analog Switch Applications

**Applications**

- Analog switches, low-pass filters, very high-speed switches

**Features**

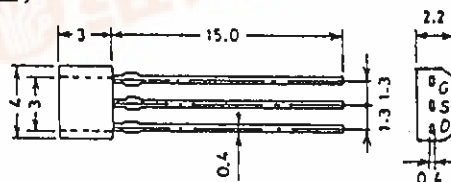
- Large  $|y_{fs}|$
- Enhancement type
- Small ON resistance

**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	$I_D$	100 mA
Drain Current (Pulse)	$I_{DP}$	300 mA
Allowable Power Dissipation	$P_D$	200 mW
Channel Temperature	$T_{ch}$	125 $^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +125 $^\circ\text{C}$

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

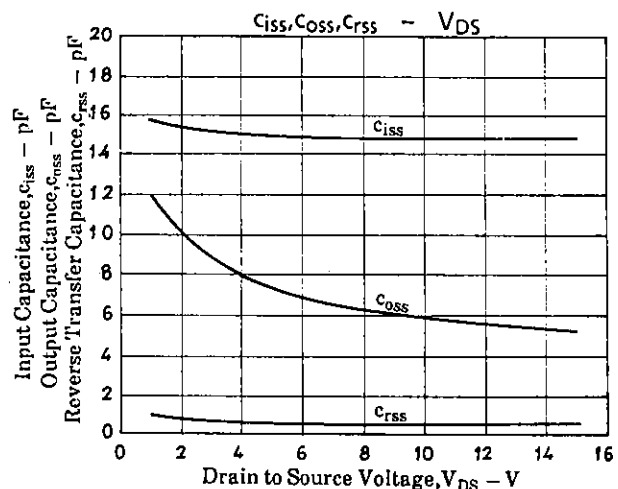
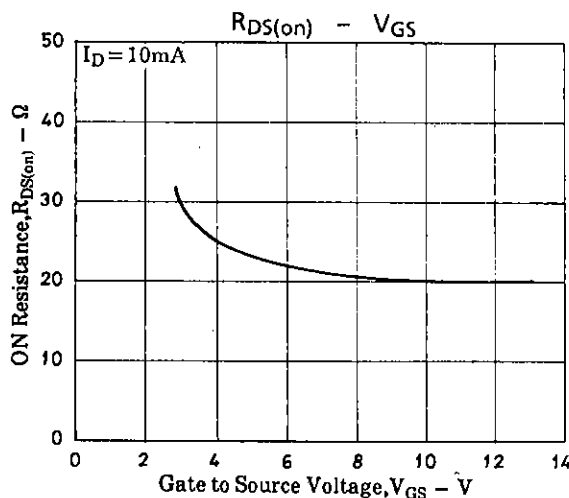
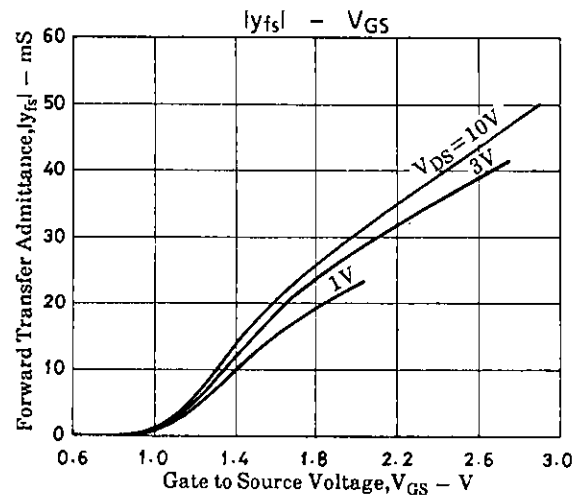
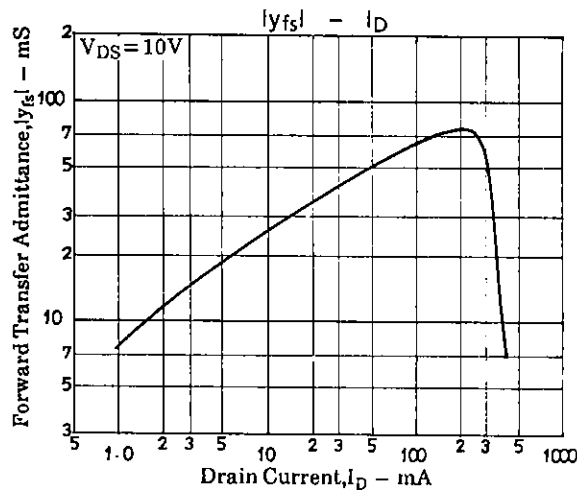
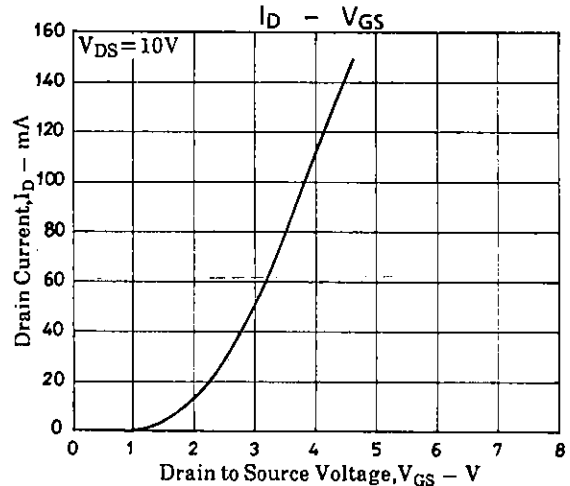
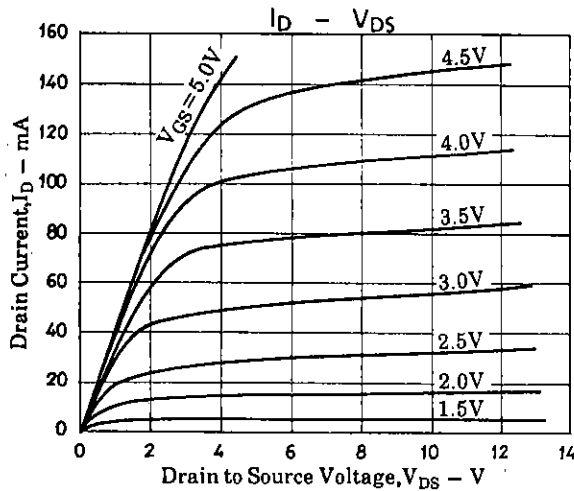
			min	typ	max	unit
Drain to Source Breakdown Voltage	$V_{(BR)DS}$	$I_D = 10\mu\text{A}, V_{GS} = 0$	50			V
Gate Cutoff Current	$I_{GSS}$	$V_{GS} = 10\text{V}, V_{DS} = 0$		0.01	10	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10\text{V}, I_D = 100\mu\text{A}$	0.3	0.9	1.5	V
Drain Current	$I_{DSS}$	$V_{DS} = 20\text{V}, V_{GS} = 0\text{V}$			1.0	$\mu\text{A}$
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	$R_{DS(on)}$	$V_{DS} = 10\text{V}, I_D = 10\text{mA}$		20		$\Omega$

**Package Dimensions 2040**  
(unit: mm)

G: Gate  
S: Source  
D: Drain

SANYO: SPA





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