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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



XP04878

Silicon N-channel MOSFET

For switching

■ Features

- Allowing 2.5 V drive
- Incorporating a built-in gate protection-diode
- S-Mini type 6-pin package, reduction of the mounting area and assembly cost by one half

■ Basic Part Number

- 2SK3539 × 2

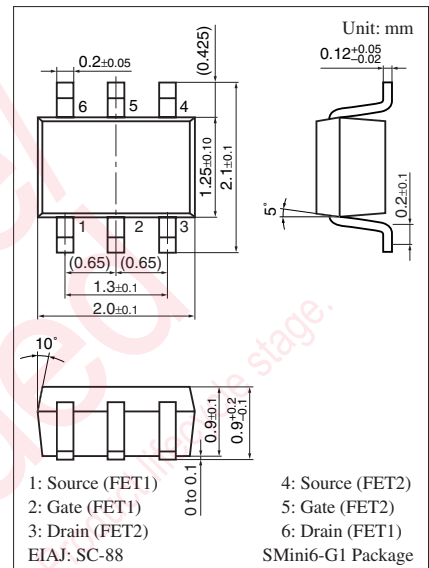
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Drain-source surrender voltage	V_{DSS}	50	V
Gate-source voltage (Drain open)	V_{GSO}	± 7	V
Drain current	I_D	100	mA
Peak drain current	I_{DP}	200	mA
Total power dissipation	P_T	150	mW
Channel temperature	T_{ch}	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

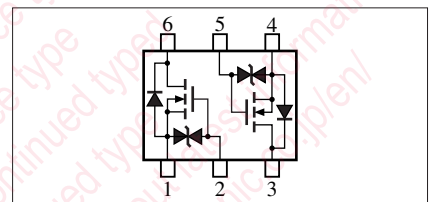
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Drain-source surrender voltage	V_{DSS}	$I_D = 10 \mu\text{A}$, $V_{GS} = 0$	50			V
Drain-source cutoff current	I_{DSS}	$V_{DS} = 50 \text{ V}$, $V_{GS} = 0$			1.0	μA
Gate-source cutoff current	I_{GSS}	$V_{GS} = \pm 7 \text{ V}$, $V_{DS} = 0$			± 5	μA
Gate threshold voltage	V_{th}	$I_D = 1 \mu\text{A}$, $V_{DS} = 3 \text{ V}$	0.9	1.2	1.5	V
Drain-source ON resistance	$R_{DS(on)}$	$I_D = 10 \text{ mA}$, $V_{GS} = 2.5 \text{ V}$		8	15	Ω
		$I_D = 10 \text{ mA}$, $V_{GS} = 4.0 \text{ V}$		6	12	
Forward transfer admittance	$ Y_{fs} $	$I_D = 10 \text{ mA}$, $V_{GS} = 4.0 \text{ V}$	20	60		mS
Short-circuit forward transfer capacitance (Common-source)	C_{iss}	$V_{DS} = 3 \text{ V}$, $V_{GS} = 0 \text{ V}$, $f = 1 \text{ MHz}$		12		pF
	C_{oss}			7		pF
	C_{rss}			3		pF
Turn-on time	t_{on}	$V_{DD} = 3 \text{ V}$, $V_{GS} = 0 \text{ V}$ to 3 V , $R_L = 470 \Omega$		200		ns
Turn-off time	t_{off}	$V_{DD} = 3 \text{ V}$, $V_{GS} = 3 \text{ V}$ to 0 V , $R_L = 470 \Omega$		200		ns

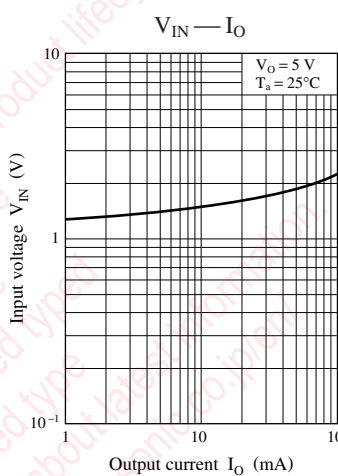
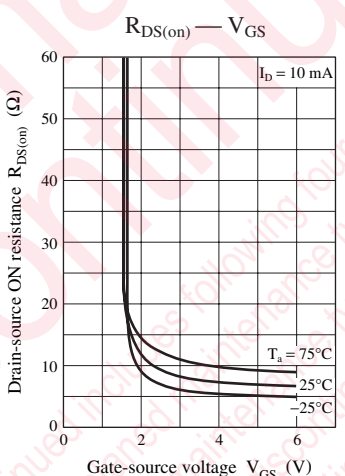
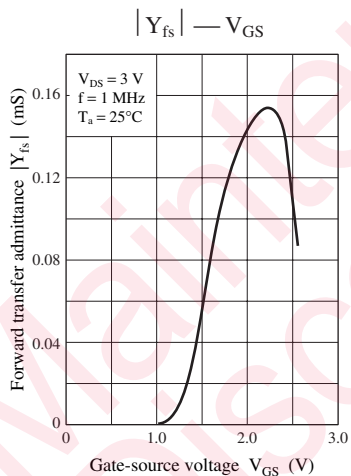
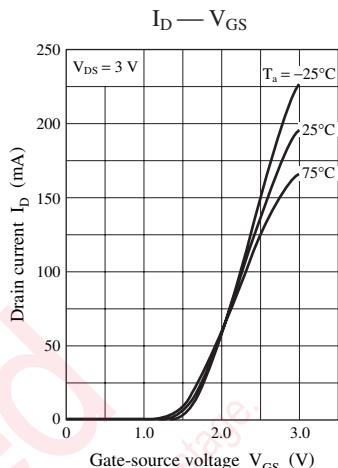
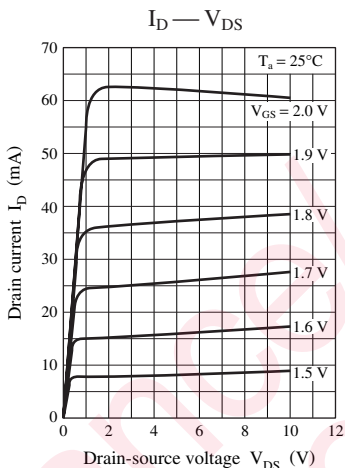
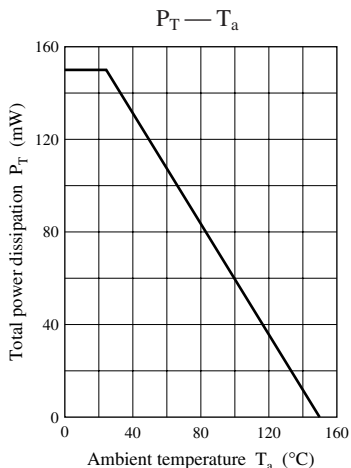
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.



Marking Symbol: 7Y

Internal Connection





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