

查询"6LN04S"供应商

SANYO Semiconductors
DATA SHEET

N-Channel Silicon MOSFET

6LN04S — General-Purpose Switching Device Applications

Features

- 1.5V drive.

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings		Unit
Drain-to-Source Voltage	V _{DSS}		60		V
Gate-to-Source Voltage	V _{GSS}			±10	V
Drain Current (DC)	I _D			200	mA
Drain Current (Pulse)	I _{DP}	PW≤10μs, duty cycle≤1%		800	mA
Allowable Power Dissipation	P _D	When mounted on glass epoxy substrate (145mm×80mm×1.6mm)		0.15	W
Channel Temperature	T _{ch}			150	°C
Storage Temperature	T _{stg}			-55 to +150	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	V _{(BR)DSS}	I _D =1mA, V _{GS} =0V	60			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =60V, V _{GS} =0V			1	μA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} =±8V, V _{DS} =0V			±10	μA
Cutoff Voltage	V _{GS(off)}	V _{DS} =10V, I _D =100μA	0.4		1.3	V
Forward Transfer Admittance	y _{fs}	V _{DS} =10V, I _D =100mA	280	480		mS
Static Drain-to-Source On-State Resistance	R _{D(on)1}	I _D =100mA, V _{GS} =4V		2.2	2.9	Ω
	R _{D(on)2}	I _D =50mA, V _{GS} =2.5V		2.4	3.4	Ω
	R _{D(on)3}	I _D =10mA, V _{GS} =1.5V		3.5	7.0	Ω
Input Capacitance	C _{iss}	V _{DS} =20V, f=1MHz		26		pF
Output Capacitance	C _{oss}	V _{DS} =20V, f=1MHz		5.9		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} =20V, f=1MHz		3.2		pF

Marking : YS

Continued on next page.

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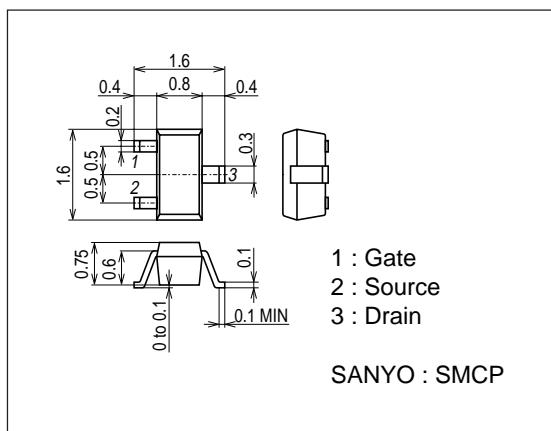
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Parameter	Symbol	Conditions	Ratings			Unit	
			min	typ	max		
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.			18.5	ns	
Rise Time	t_r	See specified Test Circuit.			26	ns	
Turn-OFF Delay Time	$t_{d(off)}$	See specified Test Circuit.			146	ns	
Fall Time	t_f	See specified Test Circuit.			69	ns	
Total Gate Charge	Q_g	$V_{DS}=30V, V_{GS}=4V, I_D=200mA$			1.0	nC	
Gate-to-Source Charge	Q_{gs}	$V_{DS}=30V, V_{GS}=4V, I_D=200mA$			0.2	nC	
Gate-to-Drain "Miller" Charge	Q_{gd}	$V_{DS}=30V, V_{GS}=4V, I_D=200mA$			0.2	nC	
Diode Forward Voltage	V_{SD}	$I_S=200mA, V_{GS}=0V$			0.83	1.2	V

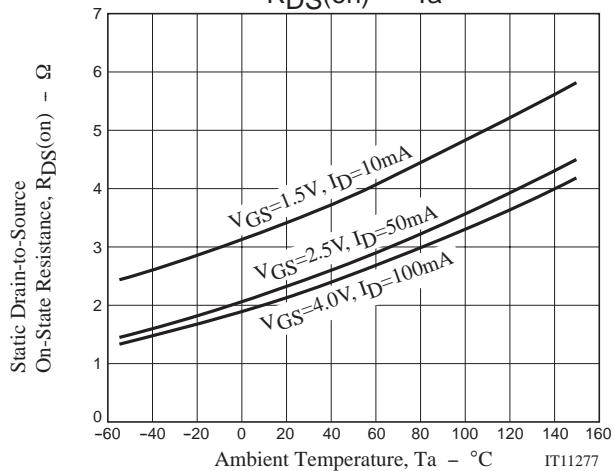
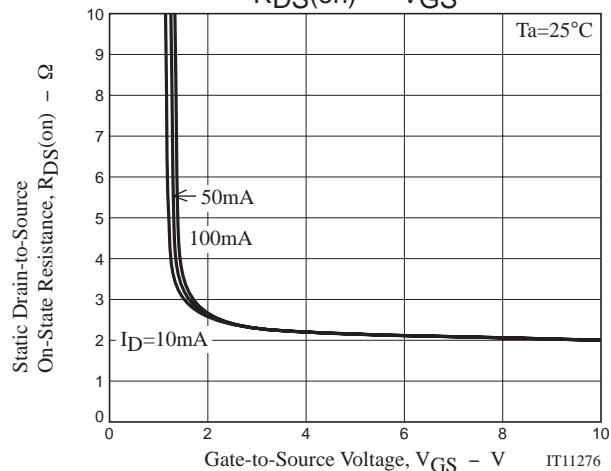
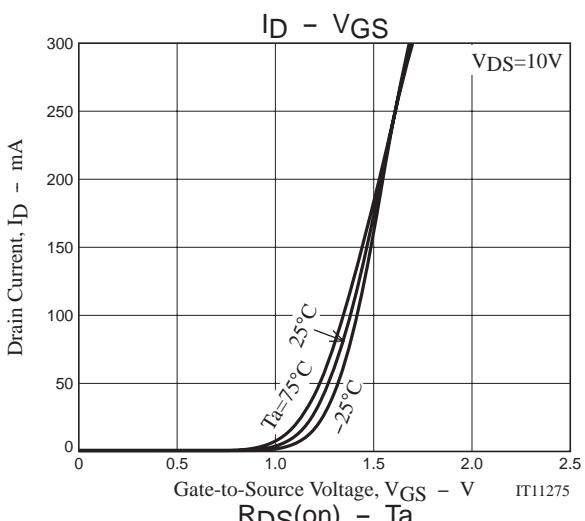
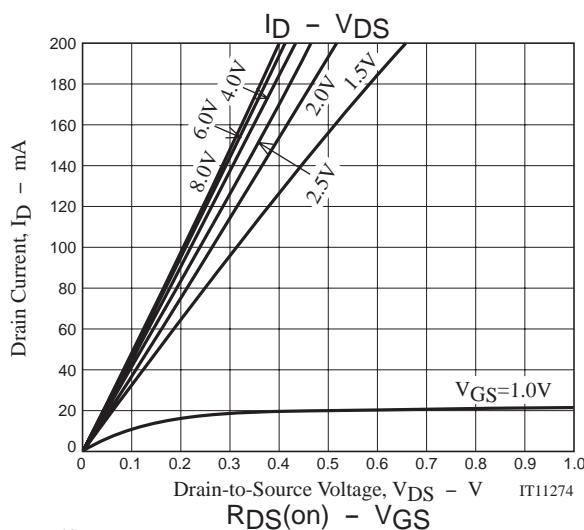
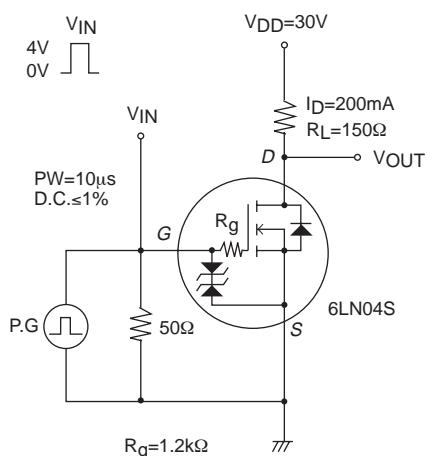
Package Dimensions

unit : mm (typ)

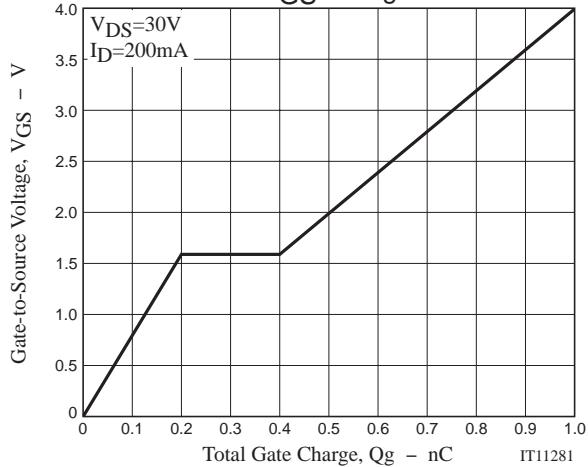
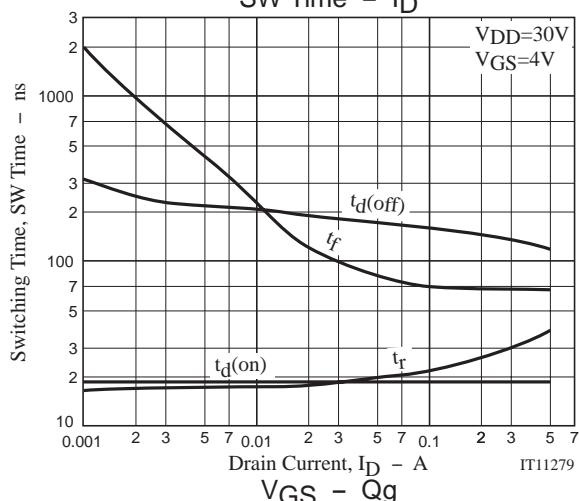
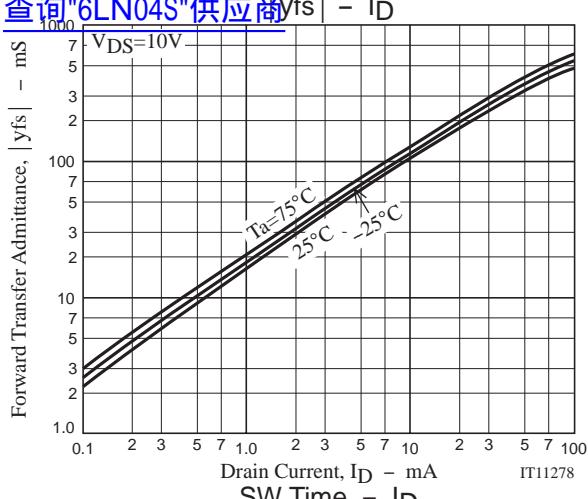
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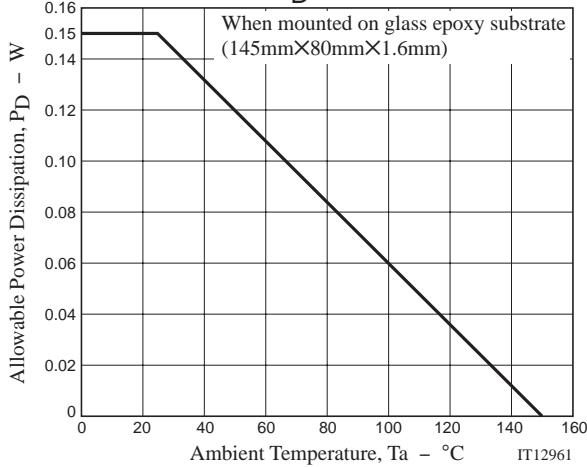
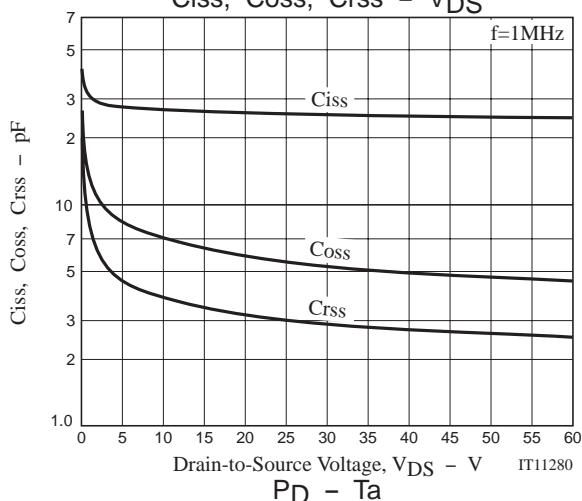
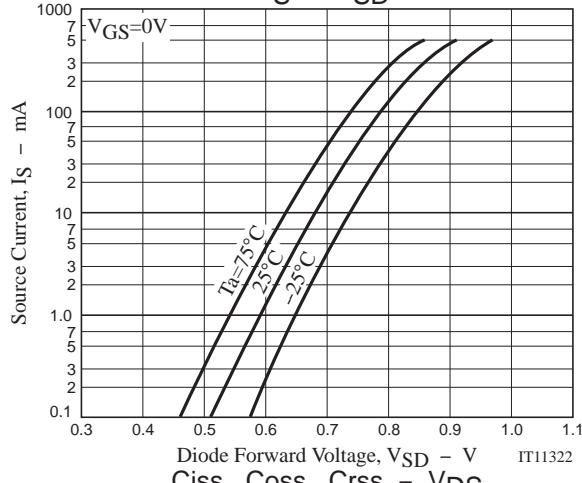
Switching Time Test Circuit



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IS - VSD



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Note on usage : Since the 6LN04S is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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