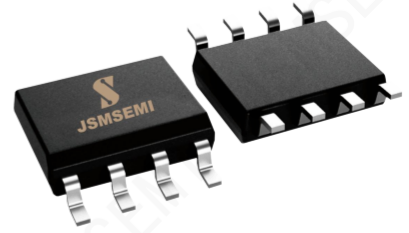


Product Summary

- V_{DS} 20V
- I_D 6A
- $R_{DS(ON)}$ (at $V_{GS}=4.5V$) < 19.5m Ω
- 100% EAS Tested
- 100% ∇V_{DS} Tested

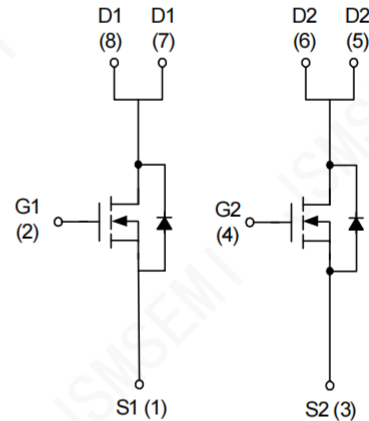


General Description

- Vertical Double-diffused MOSFET technology
- Excellent package for heat dissipation
- High density cell design for low $R_{DS(ON)}$
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free

Applications

- Power switching application
- Uninterruptible power supply
- DC-DC convertor
- Motor drivers



Maximum Ratings and Thermal Characteristics (Ta=25°C, unless otherwise specified.)

参数	符号	值	单位	
漏源电压	VDS	20	V	
栅源电压	VGS	±12		
漏极电流	ID	6	A	
漏极脉冲电流	IDM	20		
最大功耗	PD	TA=25°C	2	W
		TA=75°C	1.3	
工作结温和存储温度范围	TJ,Tstg	-55 to150	°C	
结环热阻 (PCB安装)	RθJA	62.5	°C/W	

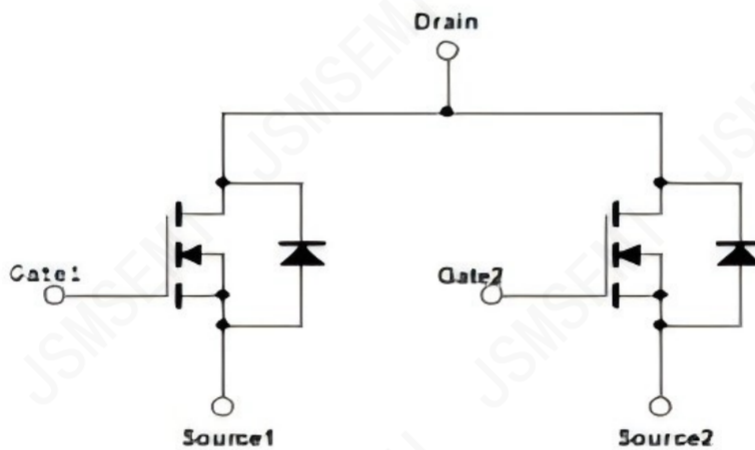
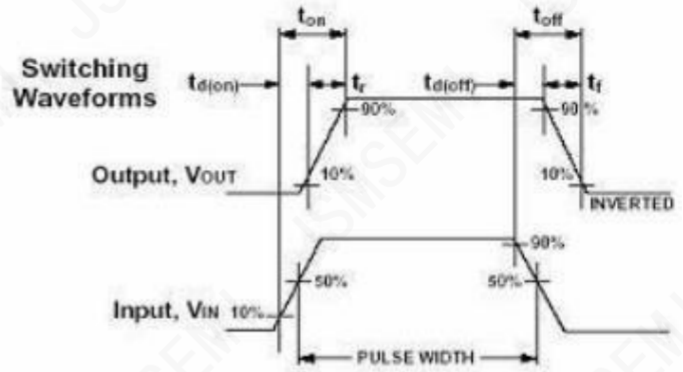
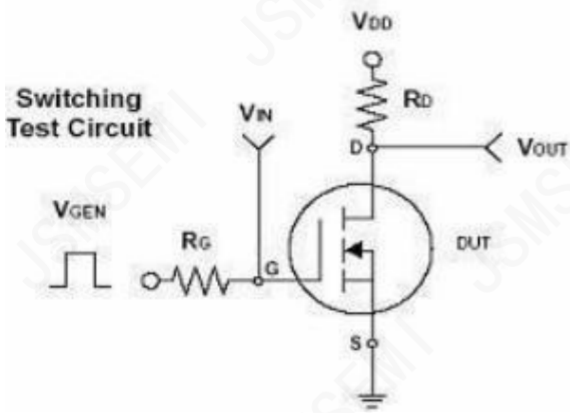
注：重复性极限值：脉冲宽度由最高结温限制。贴片时回流焊炉温请控制在 265°C 以下。

Electrical characteristics

参数	符号	测试条件	最小	典型	最大	单位
静电						
漏源击穿电压	BVDSS	VGS = 0V, ID = 250uA	20	--	--	V
漏源电阻	RDS(on)	VGS = 4.5V, ID = 1A	--	--	19.5	mΩ
		VGS = 2.5V, ID = 1A	--	--	30	
栅极阈值电压	VGS(th)	VDS = VGS , ID = 250uA	0.55	--	0.95	V
栅源短路时漏极电流	IDSS	VDS = 20V, VGS = 0V	--	--	1	uA
漏极短路时截止栅电流	IGSS	VGS = ± 12V, ID=0uA	--	--	± 100	nA

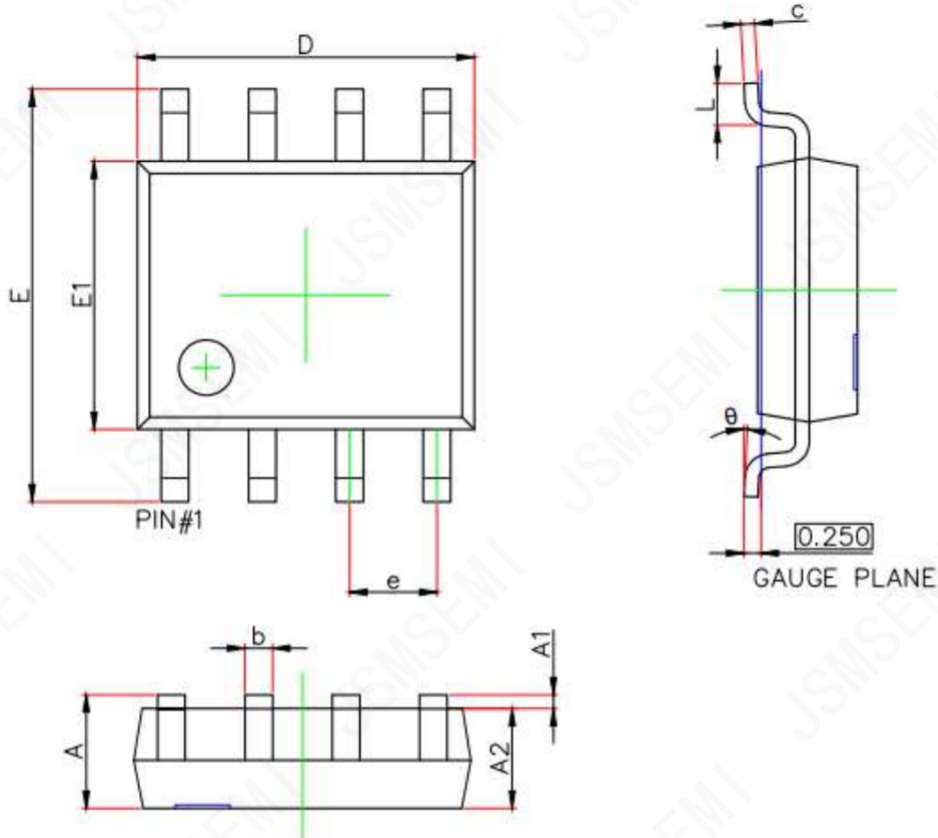
Dynamic

总栅极电荷	Qg	VDS = 10V, ID = 6A VGS = 4.5V		6.1	8.11	nC
栅源电荷	Qgs			1.5	2.13	
栅漏电荷	Qgd			1.2	1.74	
延迟时间 (On)	td(on)	VDD = 10V, ID = 6A ID = 1A, VGS = 4.5V		10.4	20.8	ns
上升时间 (On)	tr			4.4	8.8	
延迟时间 (Off)	td(off)			27.36	54.72	
下降时间 (Off)	tf			4.16	8.32	
输入电容	Ciss	VDS = 8V, VGS = 0V f=1.0MHz	--	520.3	--	pF
输出电容	Coss		--	95.48	--	
反向传输电容	Crss		--	72.69	--	
漏源二极管						
二极管最大正向电流	IS	--	--	--	1.7	A
二极管正向电压	VSD	IS = 1.7A, VGS = 0V	--	--	1.2	V



Package Information

SOP-8



符号	尺寸 (毫米)		尺寸 (英寸)	
	最小值	最大值	最小值	最大值
A	1.350	1.750	0.530	0.069
A1	0.100	0.250	0.004	0.010
A2	1.350	1.550	0.053	0.061
B	0.330	0.510	0.013	0.020
C	0.170	0.250	0.007	0.010
D	4.800	5.000	0.189	0.197
E	1.270 (BSC)		0.050 (BSC)	
E	5.800	6.200	0.228	0.224
E1	3.800	4.000	0.150	0.157
L	0.400	1.270	0.016	0.050
θ	0°	8°	0°	8°