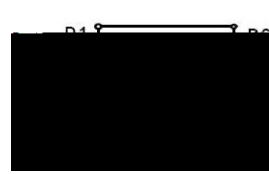


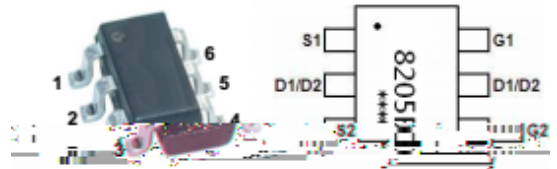
Product Summary

The ZM8205FS combines advanced trench MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$. Two N Channel MOSFET inside for dual DIE implication .



T 7T
M 2
G 5

- 1 Tf Q SU XWKSU density Trench technology
- g $R_{DS(ON)}$ to minimize conductive loss
- g 7 QU 3 XQWV Vbfast switching
- Dual DIE in one package



Power Management in Notebook Computer,
Portable Equipment and Battery Powered
Systems

MR 1 4



Part NO.	ZM8205FS
Marking	ZM8205F
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

$T_C = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	19	V
Gate-Source Voltage	V_{GS}	± 12	V
Continuous Drain Current	$I_{D@TC=25}$	7	A
	$I_{D@TC=75}$	5.3	A
	$I_{D@TC=100}$	4.4	A
Pulsed Drain Current	I_{DM}	30	A
Total Power Dissipation	$P_D@TC=25$	1.14	W
Total Power Dissipation	$P_D@TA=25$	0.69	W
Operating Junction Temperature	T_J	-55 to 150	
Storage Temperature	T_{STG}	-55 to 150	



Thermal resistance

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R_{thJC}	-	-	110	$^{\circ}C/W$
Thermal resistance, junction - ambient	R_{thJA}	-	-	150	$^{\circ}C/W$
Soldering temperature, wavesoldering for 10s	T_{sold}	-	-	265	$^{\circ}C$

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Drain-Source Breakdown	BV_{DSS}	$V_{GS} = 0V, I_D = 250\mu A$	19			V
Gate Threshold Voltage	$V_{GS(TH)}$	$V_{GS} = V_{DS}, I_D = 250\mu A$	0.5		1.2	V
Drain-Source Leakage Current	I_{DSS}	V_D				

Fig.7 Switching Time Measurement Circuit

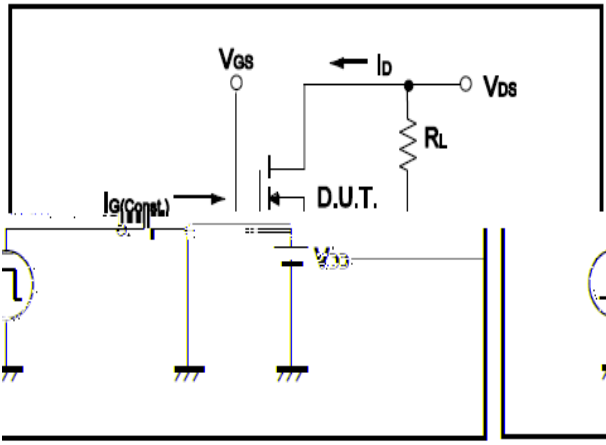


Fig.8 Gate Charge Waveform

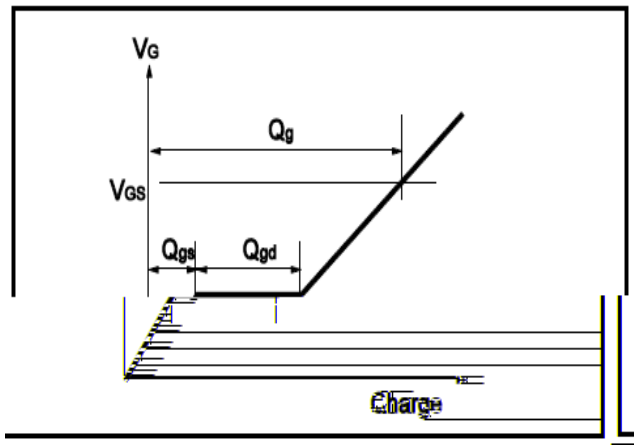


Fig.9 Switching Time Measurement Circuit

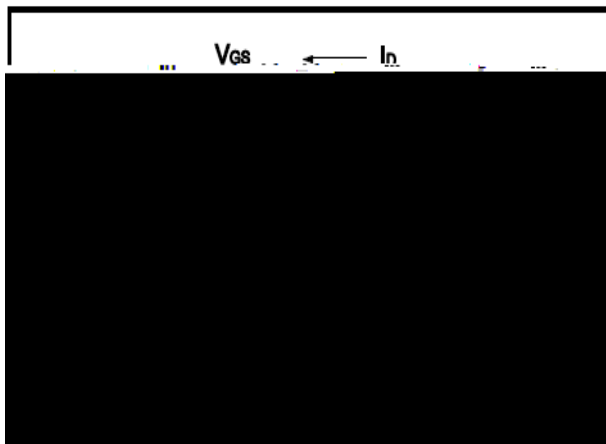


Fig.10 Gate Charge Waveform

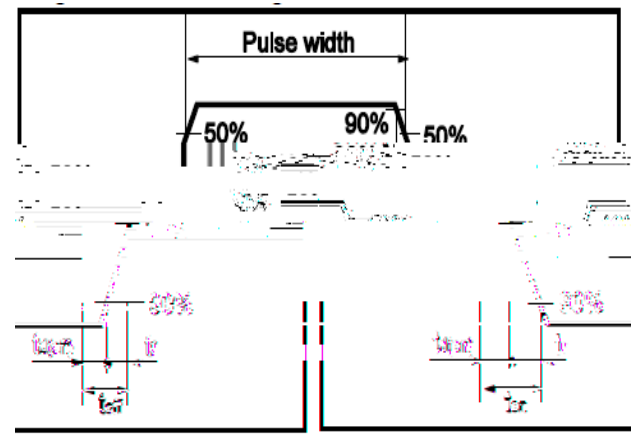


Fig.11 Avalanche Measurement Circuit

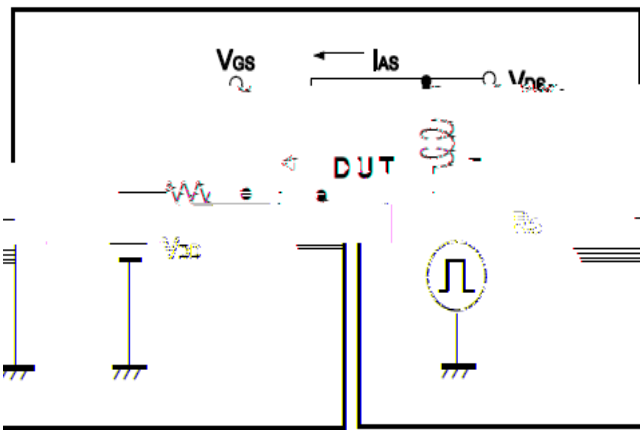
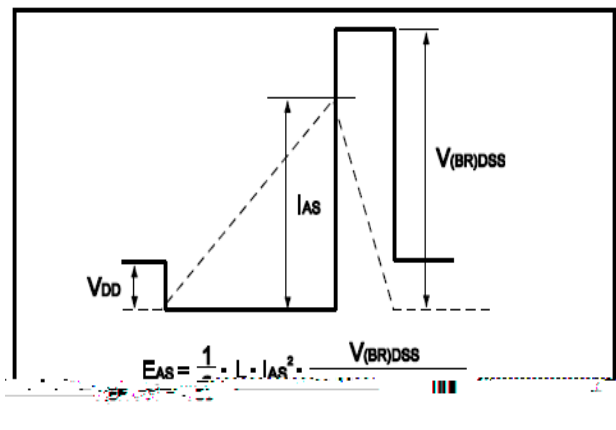


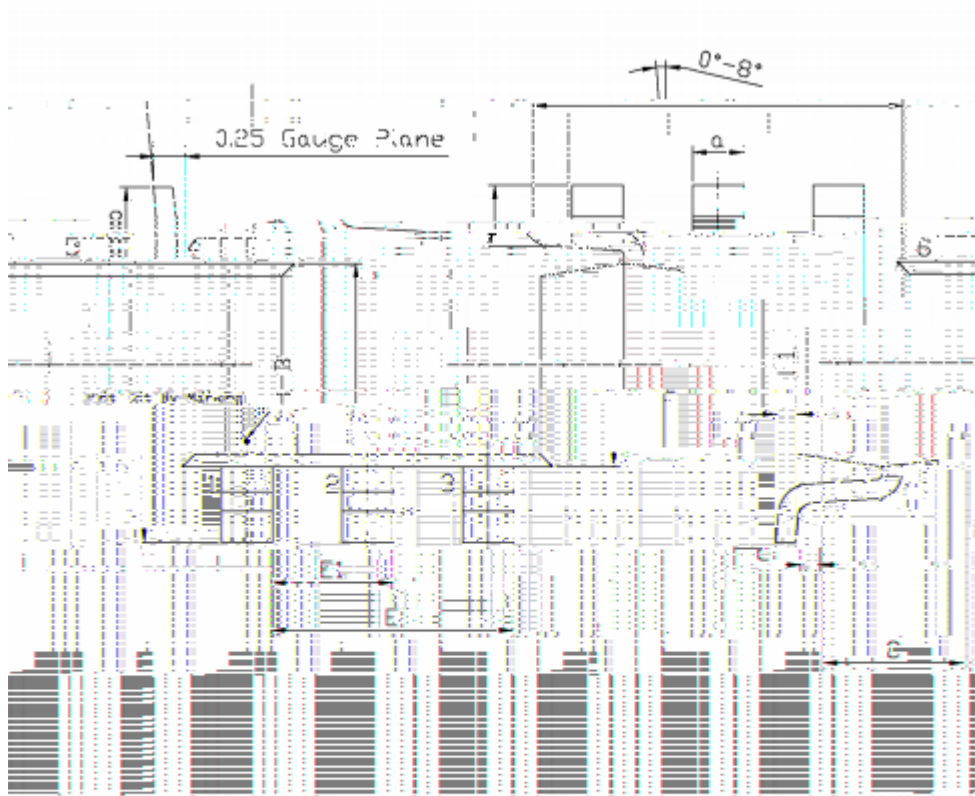
Fig.12 Avalanche Waveform





(SOT23-6)

Unit mm



Unit: mm

Symbol	Min	Max	Symbol	Min	Max
F	0.82	0.90	G	0.20	0.25
G	1.50	1.75	H	0.35	0.50
H	0.92	1.00	I	0.10	0.20
I	2.60	3.00	J	0.35	0.50
J	1.60	2.00	K	0	0.15