

V_{DS}	30V
I_b	9A
$R_{DS(on)}$ (at $V_{GS} = 10V$)	15m Ω m
$R_{DS(on)}$ (at $V_{GS} = 4.5V$)	18m Ω m

Trench Power LV MOSFET technology
High density cell design for low $R_{DS(on)}$
High Speed switching

Battery protection
Load switch
Power management

($T_A = 25$ unless otherwise noted)

Drain-source Voltage		V_{DS}	30	V
Gate-source Voltage		V_{GS}	20	V
Drain Current	$T_A = 25$	I_b	9	A
	$T_A = 70$		7.2	
Pulsed Drain Current^A		I_{DM}	50	A
Total Power Dissipation^{@ $T_A = 25$}		P_D	1.25	W
Thermal Resistance Junction to Ambient^B		R_{JA}	100	W
Junction and Storage Temperature Range		T_J, T_{STG}	-55 +150	

(Example)

YJ09N08A	F2	0309	3000	30000	120000	7'
----------	----	------	------	-------	--------	----

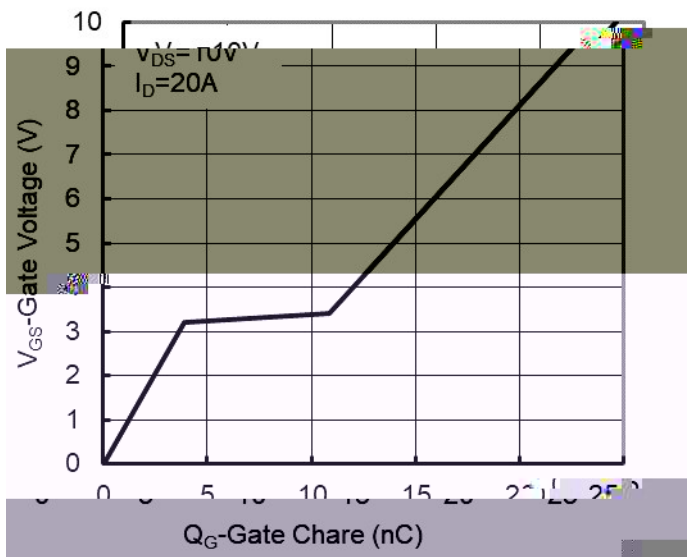
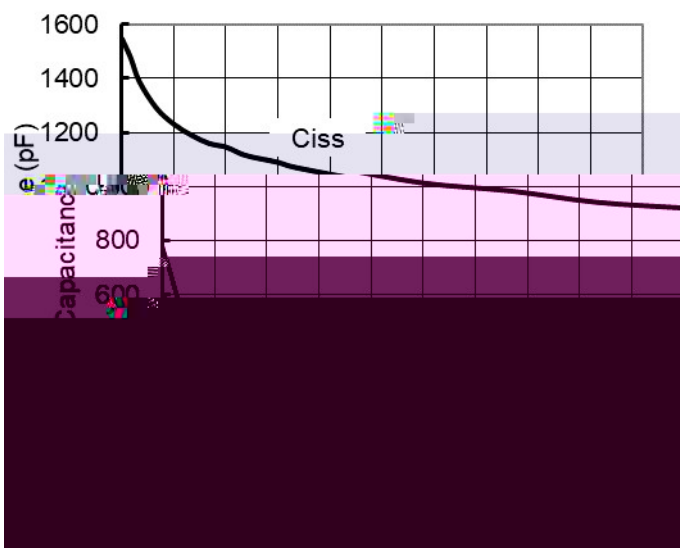
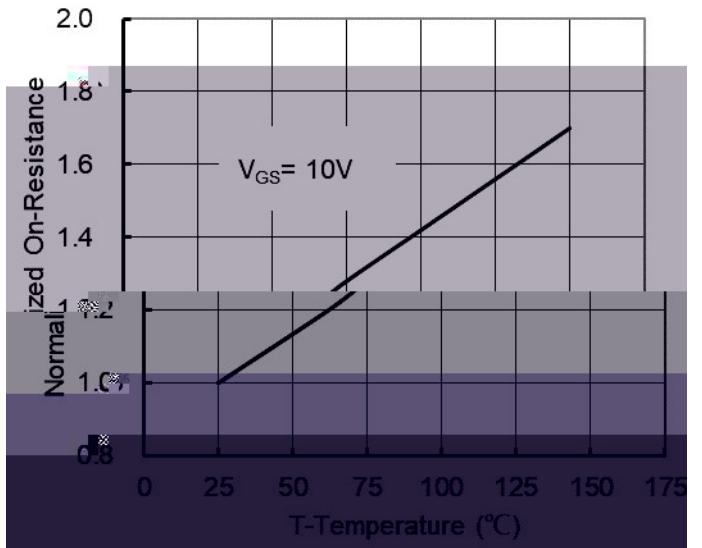
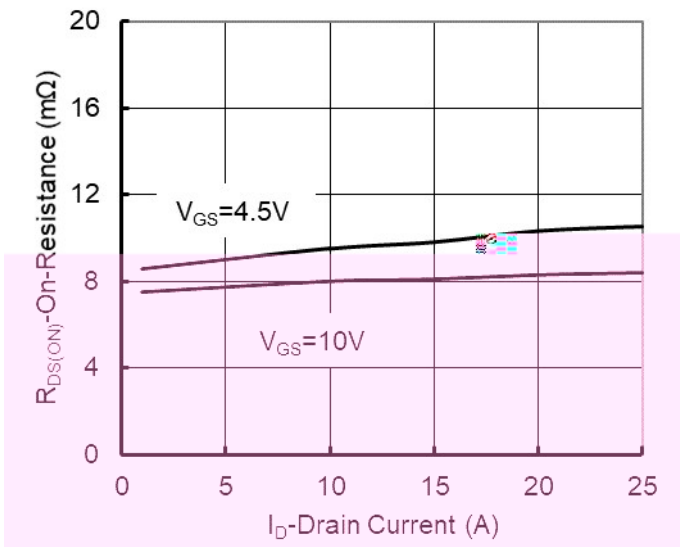
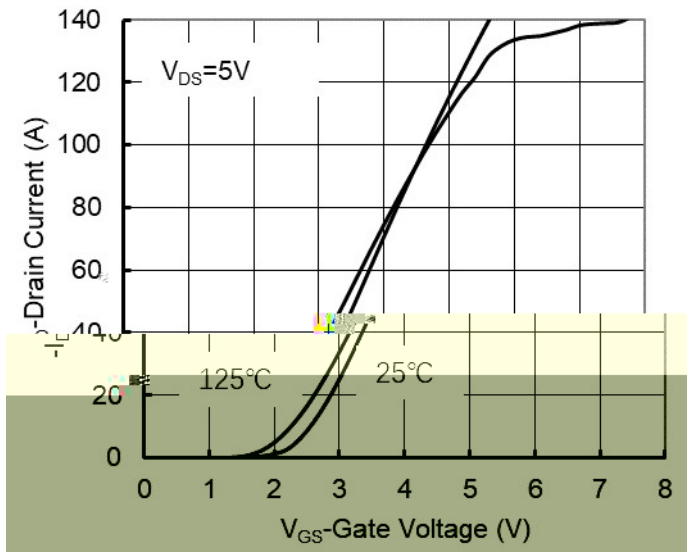
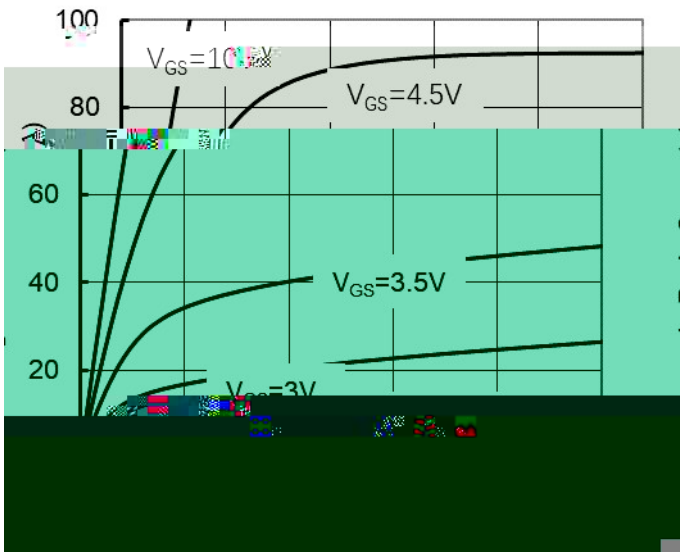


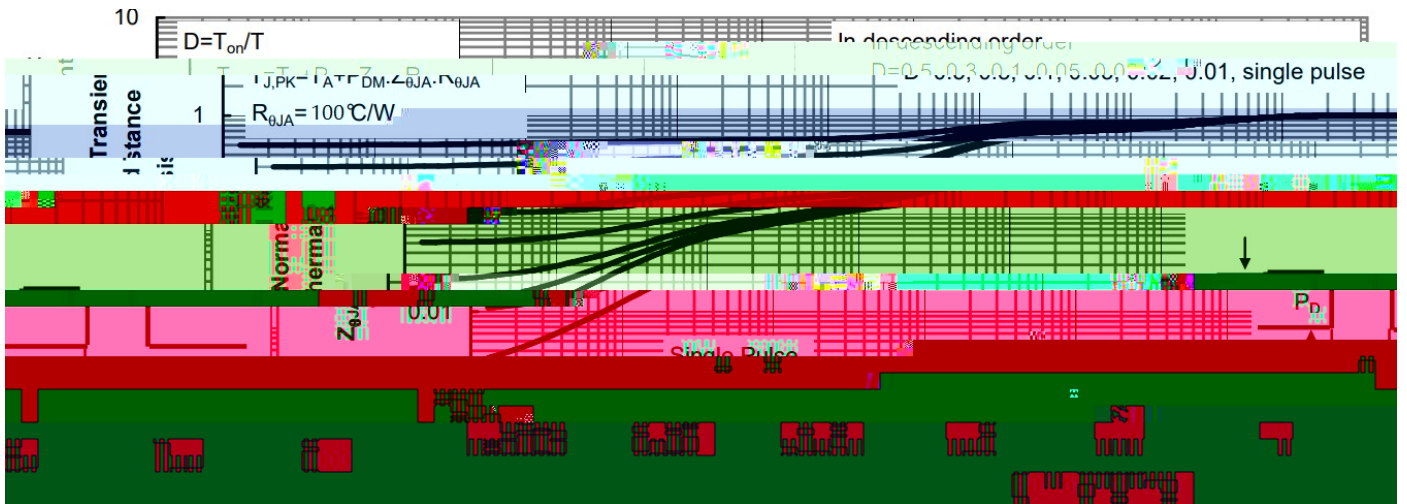
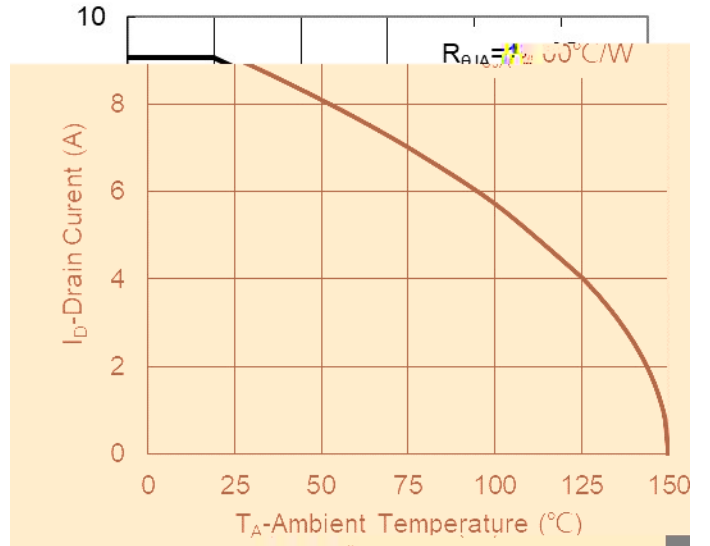
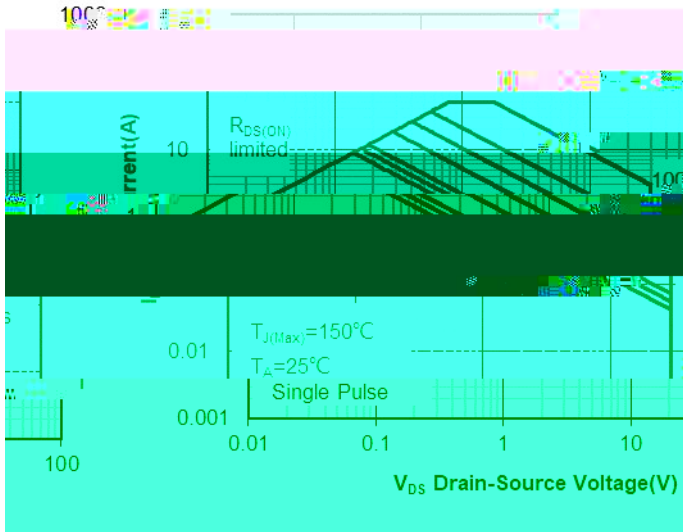
($T_J=25$ unless otherwise noted)

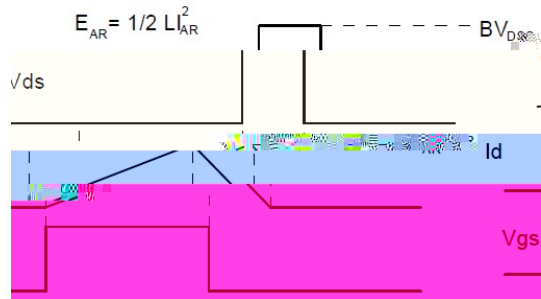
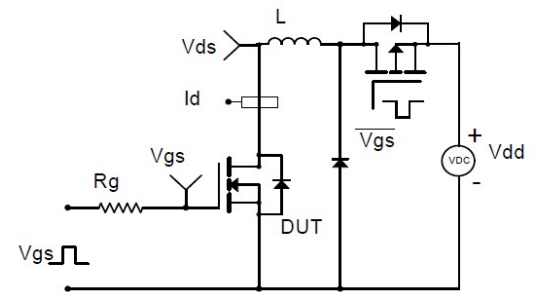
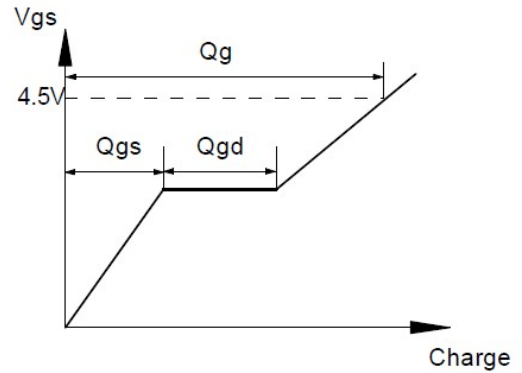
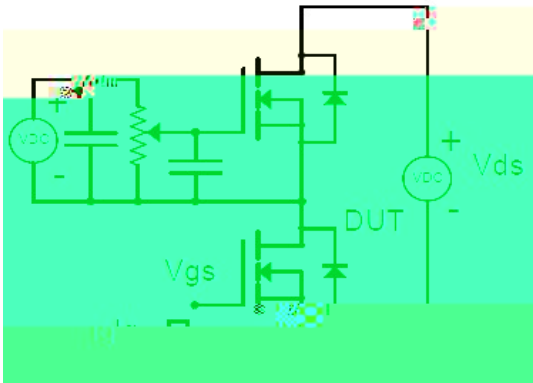
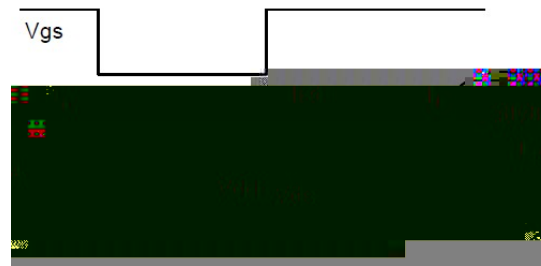
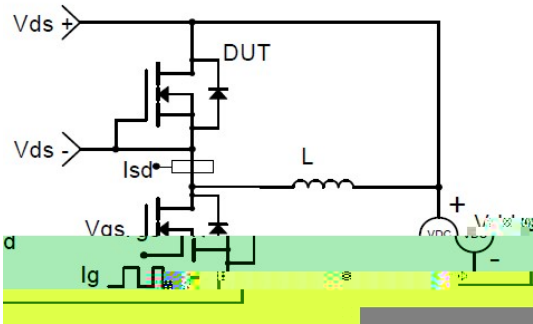
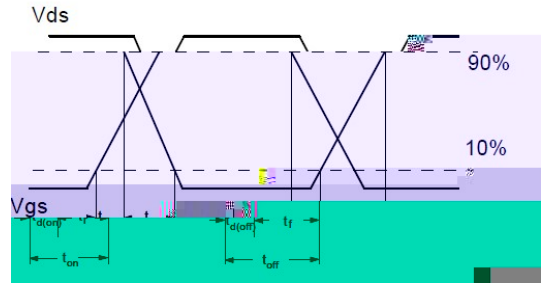
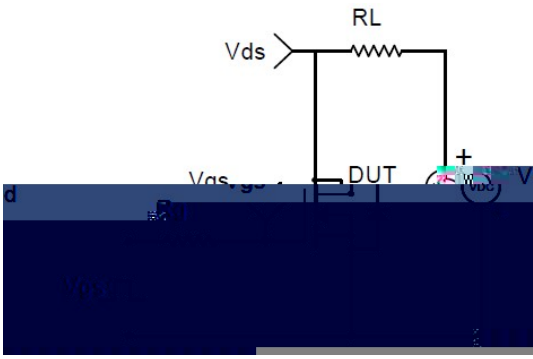
Drain Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V, I_D=250\mu A$	30			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=30V, V_{GS}=0V$			1	μA
Gate Body Leakage Current	I_{GSS}	$V_{GS}=20V, V_{DS}=0V$			100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=250\mu A$	1	1.5	2.5	V
Static Drain Source On Resistance	$R_{DS(on)}$	$V_{GS}=10V, I_D=60A$		9	15	m
		$V_{GS}=4.5V, I_D=50A$		12	18	
Diode Forward Voltage	V_{SD}	$I_S=9A, V_{GS}=0V$			1.2	V
Maximum Body Diode Continuous Current	I_S				9	A
Input Capacitance	C_{iss}	$V_{DS}=15V, V_{GS}=0V, f=1MHz$		1015		pF
Output Capacitance	C_{oss}			201		
Reverse Transfer Capacitance	C_{rss}			164		
Total Gate Charge	Q_g	$V_{GS}=10V, V_{DS}=15V, I_D=20A$		236		nC
Gate Source Charge	Q_{gs}			39		
Gate Drain Charge	Q_{gd}			70		
Reverse Recovery Charge	Q_r	$I_S=15A, di/dt=100A/\mu s$		01		nC
Reverse Recovery Time	t_r			7		
Turn on Delay Time	$t_{d(on)}$	$V_{GS}=10V, V_{DD}=20V, I_D=2A, R_{GEN}=3$		7		ns
Turn on Rise Time	t_r			19		
Turn off Delay Time	$t_{d(off)}$			24		
Turn off Fall Time	t_f			24		

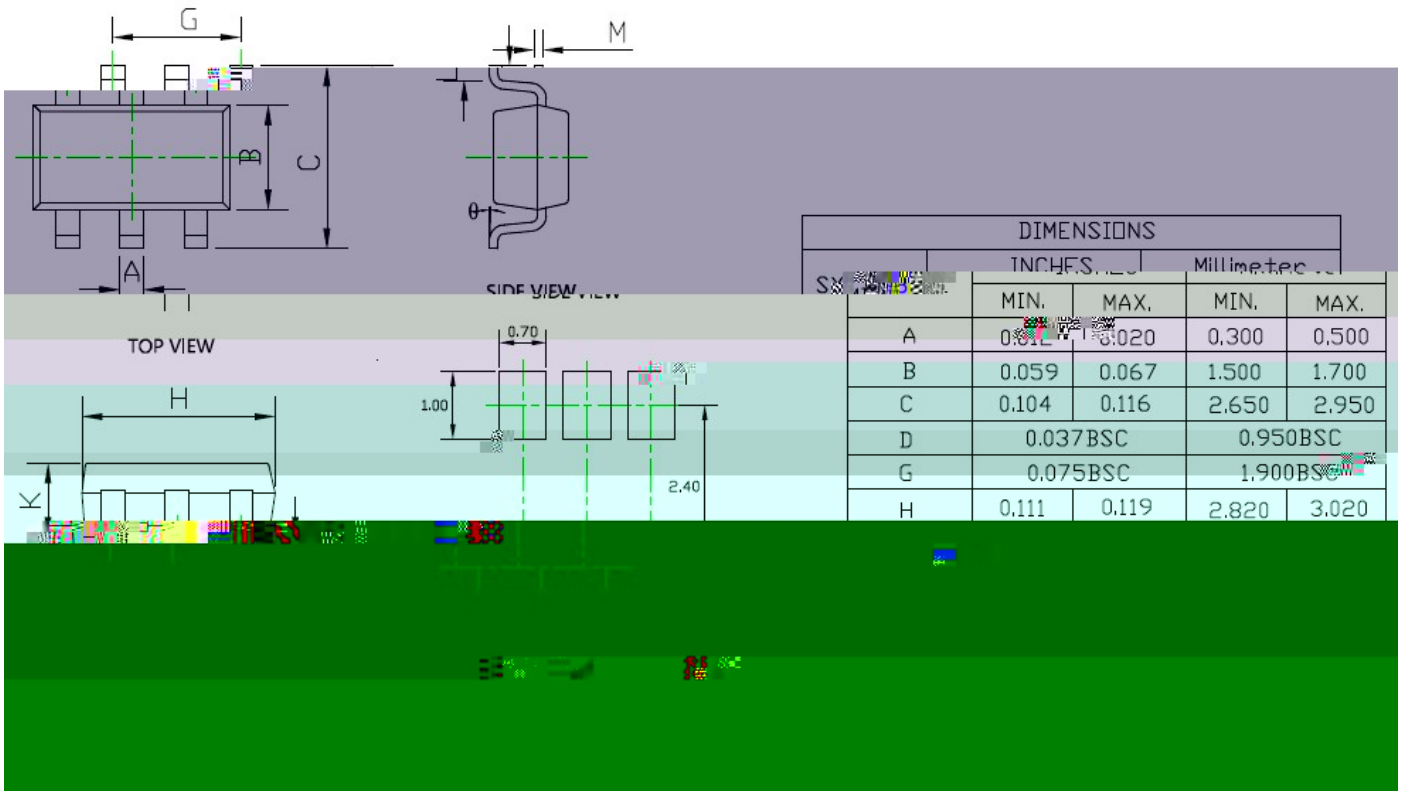
A Pulse Test Pulse Width 300 μs , Duty cycle 2%

B R_{JA} is the sum of the junction to lead and lead to ambient thermal resistance, where the lead thermal reference is defined as the solder mounting surface of the drain pins. R_{JA} is guaranteed by design, while R_{JA} is determined by the board design. The maximum rating presented here is based on mounting on a 1 in 2 pad of 2oz copper.











The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <http://www.21yangjie.com>, or consult your nearest Yangjie's sales office for further assistance.