



N-Channel and N-Channel Complementary MOSFET



Product Summary

V_{DS}	40V
I_D	70A
$R_{DS(ON)}$ (at $V_{GS}=10V$)	5.3m
100% EAS Tested	
100% V_{DS} Tested	

General Description

Excellent performance at $T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter			Symbol	Limit	Unit	
Drain-source Voltage			V_{DS}	40	V	
Gate-source Voltage			V_{GS}	± 20	V	
Continuous Drain Current (Note 1,2)	Steady-State	$T_A=25^\circ\text{C}$	I_D	16	A	
		$T_A=100^\circ\text{C}$		11		
Continuous Drain Current (Note 1,3)	Steady-State	$T_C=25^\circ\text{C}$		70		
		$T_C=100^\circ\text{C}$		49		
Pulsed Drain Current	$T_C=25^\circ\text{C}$, $t_V=100\mu\text{s}$		I_{DM}	250	A	
Avalanche energy		$V_G=10V$, $R_G=25^\circ\text{C}$, $L=0.5\text{mH}$, $I_{AS}=14A$		EAS	49	mJ
Total Power Dissipation (Note 1,2)	Steady-State	$T_A=25^\circ\text{C}$	P_D	2.5	W	
		$T_A=100^\circ\text{C}$		1.25		
Total Power Dissipation (Note 1,3)	Steady-State	$T_C=25^\circ\text{C}$		50		
		$T_C=100^\circ\text{C}$		25		
Junction and Storage Temperature Range			T_J, T_{STG}	-55 +175	-	

Thermal Resistance Junction-to-Ambient (Note 2)	Steady-State	R_{JA}	50	60	- /W
Thermal Resistance Junction-to-Case	Steady-State	R_{JC}	2.5	3	

Ordering Information (Example)

PREFERRED P/N	PACKING CODE	Marking	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YJGD5D3G04HQ	F1	YJGD5D3G04H	5000	10000	100000	13" reel



Typical Electrical and Thermal Characteristics Diagrams



YJGD5D3G04HQ

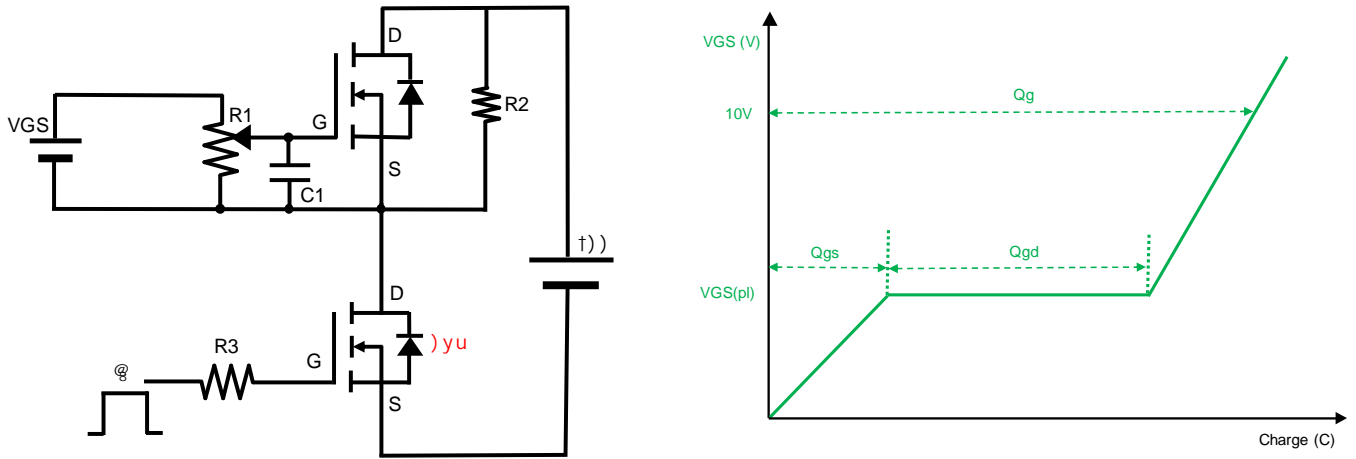
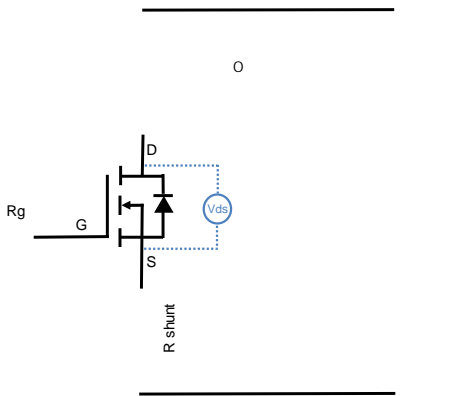


Figure B. Gate Charge Test Circuit & Waveform





YJGD5D3G04HQ

PDFN5060-8L-E-1.1mm Package information

