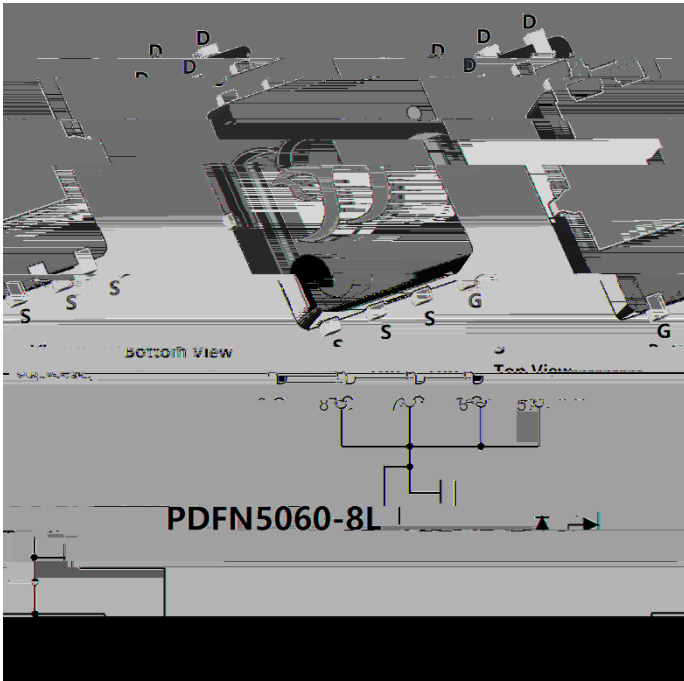




N-Channel Enhancement Mode Field Effect Transistor

Proo ~



	Steady-State	R_{JA}	50	60	/W
Thermal Resistance Junction-to-Case	Steady-State	R_{JC}	1	1.2	

Ordering Information (Example)

PREFERED P/N	PACKING CODE	Marking	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YJG1D7G04HRQ	F1	G1D7G04HR	5000	10000	100000	13" reel



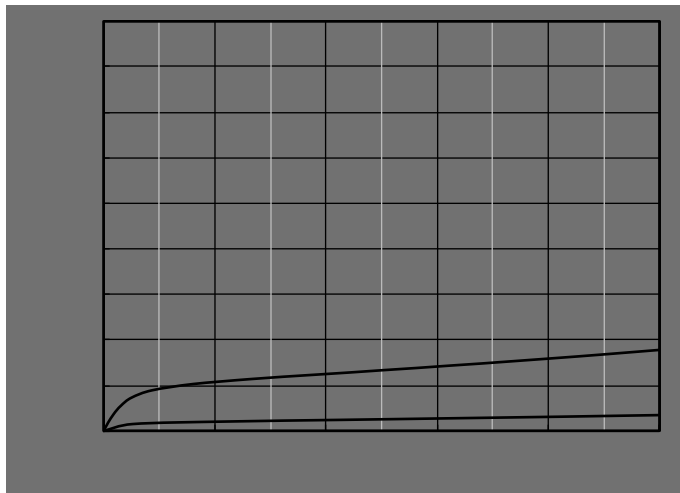
YJG1D7G04HRQ

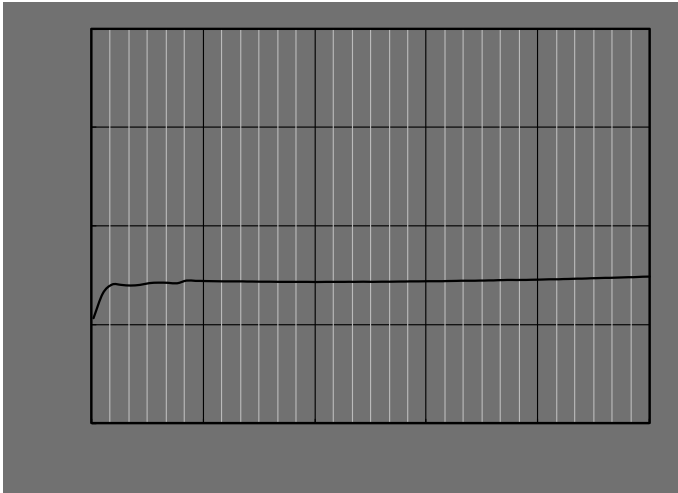
Electrical Characteristics ($T_J=25$ unless otherwise noted)

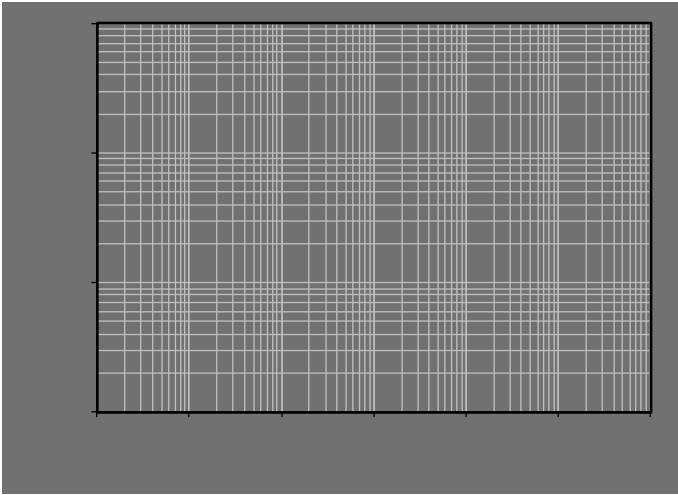
Parameter	Symbol	Conditions	Min	Typ	Max	Units
Static Parameter						
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V, I_D=1mA$	40	-	-	V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=40V, V_{GS}=0V$	-	-	1	μA
Gate-Body Leakage Current	I_{GSS}	$V_{GS}=\pm 20V, V_{DS}=0V$	-	-	± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=250\mu A$	2	3	4	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	$V_{GS}=10V, I_D=20A$	-	1.25	1.7	m
Diode Forward Voltage	V_{SD}	$I_S=20A, V_{GS}=0V$	-	0.8	1.2	V
Gate resistance	R_G	$f=1MHz$	-	1.5	-	
Maximum Body-Diode Continuous Current	I_S		-	-	180	A
Dynamic Parameters						
Input Capacitance	C_{iss}	$V_{DS}=20V, V_{GS}=0V, f=1MHz$	-	4317	-	pF
Output Capacitance	C_{oss}		-	1510	-	
Reverse Transfer Capacitance	C_{rss}		-	28	-	
Switching Parameters						
Total Gate Charge	Q_g	$V_{GS}=10V, V_{DS}=20V, I_D=90A$	-	57.3	-	nC



Typical Electrical and Thermal Characteristics Diagrams









YJG1D7G04HRQ

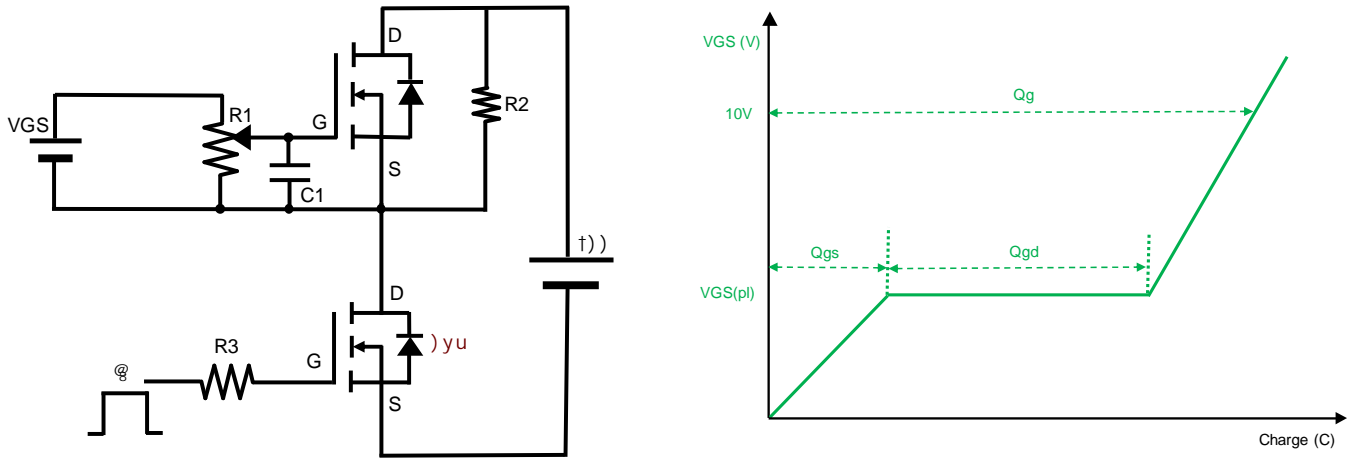


Figure B. Gate Charge Test Circuit & Waveform

