

**SWITCHING CHARACTERISTIC AND ANALYSIS OF
INSULATED-GATE BIPOLAR TRANSISTOR (IGBT)**

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“I hereby acknowledge that the scope and quality of this thesis is qualified for the award
of the Bachelor Degree of Electrical Engineering (Power Systems)”

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This thesis is submitted as partial fulfillment of the requirement for the award of the
Bachelor Degree of Electrical Engineering (Power Systems)

Faculty of Electrical & Electronic Engineering
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APRIL, 2009

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TABLE OF CONTENTS

CHAPTER	CONTENTS	PAGE
	TITLE	i
	DECLARATION	ii
	DEDICATION	iii
	ACKNOWLEDGEMENT	iv
	ABSTRACT	v
	ABSTRAK	vi
	TABLE OF CONTENTS	vii
	LIST OF FIGURES	xii
	LIST OF TABLES	xiv
	LIST OF ABBREVIATIONS	xv
	LIST OF APPENDICES	xvi

1	INTRODUCTION	1
1.1	Introduction	2
1.2	Overview	2
1.3	Problem Statement	3
1.4	Objective	3
1.5	Scope of the Project	3
1.5.1	Software Development of IGBT Test Circuit	3
1.5.2	Data Analysis of 2 Types of IGBT	4
1.4.3	Using Microsoft Excel to Store Data	4
1.6	Thesis Outline	5
2	LITERATURE REVIEW	6
2.1	Insulated-gate Bipolar Transistor (IGBT)	7
2.2	High & Low Side Driver	8
2.3	PROTEUS ISIS 7 Professional	9
2.4	Microsoft Excel	10
3	METHODOLOGY	11
3.1	Introduction	12
3.2	Software Implementation/Design Simulation	13
3.2.1	PROTEUS ISIS 7 Professional	13

3.3	Hardware Development	14
3.3.1	Gate Driver Circuit	14
3.3.1.1	Integrated Circuit (IC) IR2109	15
3.3.2	Main IGBT Test Circuit	17
3.3.2.1	IRG4IBC20UPBF	17
3.3.2.2	IRGPC50F	18
3.4	Data Management	19
3.4.1	Data Storage Using Microsoft Excel	19
3.4.2	Rise Time, t_r and Fall Time, t_f	19
3.4.3	$T_{d(on)}$ and $T_{d(off)}$	20
3.4.4	$V_{gate(on)}$ and $V_{gate(off)}$	20
4	RESULT, DISCUSSION AND ANALYSIS	21
4.1	Introduction	22
4.2	Power Supply Output Voltage	22
4.2.1	Discussion	23
4.3	Driver Circuit Output Result	23
4.3.1	Discussion	24
4.4	Pulse Width Modulation (PWM)	26
4.4.1	Discussion	26
4.5	Simulation Results	26

5	CONCLUSION	36
5.1	Conclusion	37
	REFERENCE	42
	APPENDIX A	44
	APPENDIX B	56
	APPENDIX C	63
	APPENDIX D	73

LIST OF FIGURE

FIGURE	TITLE	PAGE
2.1	IGBT Structure	7
2.2	Static Characteristic of an IGBT	8
3.1	Flow Chart of the project	12
3.2	Finalized Circuit Design	14
3.3	Driver circuit configuration scheme	15
3.4	Driver circuit operational block diagram	15
3.5	Functional block diagram of IR210X	16
3.6	Configuration of test circuit of IGBT	17
3.7	n-channel IGBT with ultra fast recovery diode	18
3.8	standard n-channel ultra fast speed IGBT	18
4.1	Output of DC power supply of 15V	22
4.2	Test point of PWM output of IR2109	23
4.3	PWM output at end of the driver circuit	24
4.4	Noise cause by long wire jumper	25
4.5	Voltage drop cause sy standard wire jumper	25

4.6	Simulation test of IGBT switching characteristics	27
4.7(a)	Graph of $I_{\text{collector}}$ vs. V_{gate} of IRG4BC20SD on 20Vdc input	28
4.7(b)	Graph of Power vs. V_{gate} of IRG4BC20SD on 20Vdc input	29
4.8(a)	Graph of $I_{\text{collector}}$ vs. V_{gate} of IRG4BC20SD on 80Vdc input	29
4.8(b)	Graph of Power vs. V_{gate} of IRG4BC20SD on 80Vdc input	30
4.9(a)	Graph of $I_{\text{collector}}$ vs. V_{gate} of IRG4BC20SD on 480Vdc input	30
4.9(b)	Graph of Power vs. V_{gate} of IRG4BC20SD on 480Vdc input	31
4.10(a)	Graph of $I_{\text{collector}}$ vs. V_{gate} of IRG4RC10U on 20Vdc input	32
4.10(b)	Graph of Power vs. V_{gate} of IRG4RC10U on 20Vdc input	33
4.11(a)	Graph of $I_{\text{collector}}$ vs. V_{gate} of IRG4RC10U on 80Vdc input	33
4.11(b)	Graph of Power vs. V_{gate} of IRG4RC10U on 80Vdc input	34
4.12(a)	Graph of $I_{\text{collector}}$ vs. V_{gate} of IRG4RC10U on 480Vdc input	34
4.12(b)	Graph of Power vs. V_{gate} of IRG4RC10U on 480Vdc input	35

LIST OF TABLE

TABLE	TITLE	PAGE
2.1	High & Low Side Driver Features Comparison	10
4.1	Result of IRG4BC20SD on 20Vdc collector voltage input	27
4.2	Result of IRG4BC20SD on 80Vdc collector voltage input	28
4.3	Result of IRG4BC20SD on 480Vdc collector voltage input	28
4.4	Result of IRG4RC10U on 20Vdc collector voltage input	31
4.5	Result of IRG4RC10U on 80Vdc collector voltage input	31
4.6	Result of IRG4RC10U on 480Vdc collector voltage input	32
5.1	Cost estimate for Test Circuit of IGBT	40

LIST OF ABBREVIATIONS

IGBT	-	Insulated-gate bipolar transistor
MOSFET	-	Metal–oxide–semiconductor field-effect transistor
P	-	Power
V	-	Voltage
I	-	Current
V _{dc}	-	Direct Current Voltage
DC	-	Direct Current
PWM	-	Pulse width modulation
IC	-	Integrated circuit
V _g	-	Gate terminal voltage
FET	-	Field-effect transistor
CMOS	-	Complementary metal–oxide–semiconductor
HVDC	-	High Voltage Direct Current
VSM	-	Virtual System Modeling
LSTTL	-	Large Scale Transistor-transistor Logic
SPICE	-	Simulation Program with Integrated Circuit Emphasis
Op-amp	-	Operational amplifier

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
A	Data Sheet of IRG4IBC20UPBF	44
B	Data Sheet of IRGPC50F	56
C	Data Sheet of IR2109	63
D	Author's Biography	73