



Vincotech

10-PC094PB017ME02-L620F36Y

datasheet

fastPACK 0 SiC

900 V / 22 mΩ

Features

- 900V SiC MOS
- Switching frequency up to 400kHz
- Suitable for hard switching/soft switching
- Increased power density
- NTC

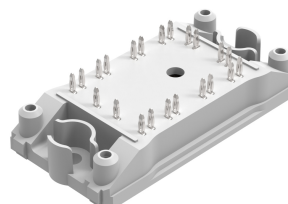
Target applications

- Power Supply
- Special Application
- Welding & Cutting

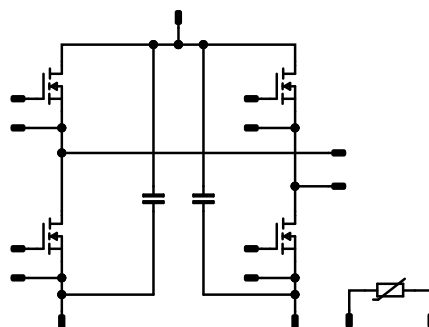
Types

- 10-PC094PB017ME02-L620F36Y

flow 0 12 mm housing



Schematic





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Maximum Ratings

$T_j = 25\text{ °C}$, unless otherwise specified

Parameter	Symbol	Conditions	Value	Unit
H-Bridge Switch - Lo side				
Drain-source voltage	V_{DS}		900	V
Drain current	I_D	$T_j = T_{jmax}$ $T_s = 80\text{ °C}$	57	A
Peak drain current	I_{DM}	t_p limited by T_{jmax}	270	A
Avalanche energy, single pulse	E_{AS}	$V_{DD} = 50\text{ V}$ $I_D = 66$	330	mJ
Total power dissipation	P_{tot}	$T_j = T_{jmax}$ $T_s = 80\text{ °C}$	101	W
Gate-source voltage	V_{GS}		-4 / 15	V
Maximum Junction Temperature	T_{jmax}		175	°C

H-Bridge Switch - Hi side

Drain-source voltage	V_{DS}		900	V
Drain current	I_D	$T_j = T_{jmax}$ $T_s = 80\text{ °C}$	57	A
Peak drain current	I_{DM}	t_p limited by T_{jmax}	270	A
Avalanche energy, single pulse	E_{AS}	$V_{DD} = 50\text{ V}$ $I_D = 66$	330	mJ
Total power dissipation	P_{tot}	$T_j = T_{jmax}$ $T_s = 80\text{ °C}$	101	W
Gate-source voltage	V_{GS}		-4 / 15	V
Maximum Junction Temperature	T_{jmax}		175	°C

Capacitor (DC)

Maximum DC voltage	V_{MAX}		1000	V
Operation Temperature	T_{op}		-55 ... 125	°C



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Maximum Ratings

$T_j = 25\text{ °C}$, unless otherwise specified

Parameter	Symbol	Conditions	Value	Unit
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Module Properties

Thermal Properties

Storage temperature	T_{stg}		-40...+125	°C
Operation temperature under switching condition	T_{jop}		-40...+(T_{jmax} - 25)	°C

Isolation Properties

Isolation voltage	V_{isol}	DC Test Voltage* $t_p = 2\text{ s}$	6000	V
Isolation voltage	V_{isol}	AC Voltage $t_p = 1\text{ min}$	2500	V
Creepage distance			min. 12,7	mm
Clearance			9,6	mm
Comparative Tracking Index	CTI		≥ 200	

*100 % tested in production



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Characteristic Values

Parameter	Symbol	Conditions					Values			Unit
			V_{GE} [V] V_{GS} [V]	V_{CE} [V] V_{DS} [V] V_F [V]	I_C [A] I_D [A] I_F [A]	T_j [°C]	Min	Typ	Max	

H-Bridge Switch - Lo side

Static

Drain-source on-state resistance	$r_{DS(on)}$		15		114	25 125 150		23 28 31	26	mΩ
Gate-source threshold voltage	$V_{GS(th)}$		0		0,005	25	1,7	2,4	3,5	V
Gate to Source Leakage Current	I_{GSS}		15	0		25		30	750	nA
Zero Gate Voltage Drain Current	I_{DSS}		0	0	0	25		3	300	μA
Internal gate resistance	r_g							1,57		Ω
Gate charge	Q_g		-4/15	400	60	25		91,2		nC
Gate to source charge	Q_{GS}							22,5		
Gate to drain charge	Q_{GD}							36		
Short-circuit input capacitance	C_{iss}	$f = 1$ Mhz	0	600	0	25		1980		pF
Short-circuit output capacitance	C_{oss}							180		
Reverse transfer capacitance	C_{rss}							12		
Diode forward voltage	V_{SD}		0		0	25		4,8		V

Thermal

Thermal resistance junction to sink*	$R_{th(j-s)}$	$\lambda_{paste} = 3,4$ W/mK (PSX)						0,94		K/W
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*Only valid with pre-applied Vincotech thermal interface material.

Dynamic

Turn-on delay time	$t_{d(on)}$	$R_{gon} = 2 \Omega$ $R_{goff} = 2 \Omega$	-5/15	600	60	25 125 150		15,2 14,2 15,2		ns
Rise time	t_r					25 125 150		6,8 6,2 6,2		ns
Turn-off delay time	$t_{d(off)}$					25 125 150		47,2 48,4 46,8		ns
Fall time	t_f					25 125 150		11,4 11,8 10,2		ns
Turn-on energy (per pulse)	E_{on}					25 125 150		0,681 0,607 0,618		mWs
Turn-off energy (per pulse)	E_{off}					25 125 150		0,153 0,101 0,095		mWs



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Characteristic Values

Parameter	Symbol	Conditions					Value			Unit
			V_{GE} [V] V_{GS} [V]	V_{CE} [V] V_{DS} [V] V_F [V]	I_C [A] I_D [A] I_F [A]	T_j [°C]	Min	Typ	Max	
Dynamic										
Peak recovery current	I_{RRM}	$di/dt = 10218 \text{ A}/\mu\text{s}$ $di/dt = 11319 \text{ A}/\mu\text{s}$ $di/dt = 11508 \text{ A}/\mu\text{s}$	-5/15	600	60	25		99		A
						125		115		
						150		127		
Reverse recovery time	t_{rr}					25		18		ns
						125		17		
						150		18		
Recovered charge	Q_r					25		1,059		μC
						125		1,150		
						150		1,323		
Reverse recovered energy	E_{rec}					25		0,070		mWs
						125		0,070		
						150		0,120		
Peak rate of fall of recovery current	$(di_{rr}/dt)_{max}$					25		18427		A/ μs
						125		26726		
						150		30513		



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Characteristic Values

Parameter	Symbol	Conditions					Values			Unit
			V_{GE} [V] V_{GS} [V]	V_{CE} [V] V_{DS} [V] V_F [V]	I_C [A] I_D [A] I_F [A]	T_j [°C]	Min	Typ	Max	

H-Bridge Switch - Hi side

Static

Drain-source on-state resistance	$r_{DS(on)}$		15		114	25 125 150		23 28 31	26	mΩ
Gate-source threshold voltage	$V_{GS(th)}$		0		0,005	25	1,7	2,4	3,5	V
Gate to Source Leakage Current	I_{GSS}		15	0		25		30	750	nA
Zero Gate Voltage Drain Current	I_{DSS}		0	0	0	25		3	300	μA
Internal gate resistance	r_g							1,57		Ω
Gate charge	Q_g		-4/15	400	60	25		91,2		nC
Gate to source charge	Q_{GS}							22,5		
Gate to drain charge	Q_{GD}							36		
Short-circuit input capacitance	C_{iss}	$f = 1$ Mhz	0	600	0	25		1980		pF
Short-circuit output capacitance	C_{oss}							180		
Reverse transfer capacitance	C_{rss}							12		
Diode forward voltage	V_{SD}		0		0	25		4,8		V

Thermal

Thermal resistance junction to sink*	$R_{th(j-s)}$	$\lambda_{paste} = 3,4$ W/mK (PSX)						0,94		K/W
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*Only valid with pre-applied Vincotech thermal interface material.

Dynamic

Turn-on delay time	$t_{d(on)}$	$R_{gon} = 2 \Omega$ $R_{goff} = 2 \Omega$	-5/15	600	60	25 125 150		15,2 14,2 15,2		ns
Rise time	t_r					25 125 150		6,8 6,2 6,2		ns
Turn-off delay time	$t_{d(off)}$					25 125 150		47,2 48,4 46,8		ns
Fall time	t_f					25 125 150		11,4 11,8 10,2		ns
Turn-on energy (per pulse)	E_{on}					25 125 150		0,681 0,607 0,618		mWs
Turn-off energy (per pulse)	E_{off}					25 125 150		0,153 0,101 0,095		mWs



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Characteristic Values

Parameter	Symbol	Conditions					Value			Unit
			V_{GE} [V] V_{GS} [V]	V_{CE} [V] V_{DS} [V] V_F [V]	I_C [A] I_D [A] I_F [A]	T_j [°C]	Min	Typ	Max	
Dynamic										
Peak recovery current	I_{RRM}	$di/dt = 10218 \text{ A}/\mu\text{s}$ $di/dt = 11319 \text{ A}/\mu\text{s}$ $di/dt = 11508 \text{ A}/\mu\text{s}$	-5/15	600	60	25		99		A
						125		115		
						150		127		
Reverse recovery time	t_{rr}					25		18		ns
						125		17		
						150		18		
Recovered charge	Q_r					25		1,059		μC
						125		1,150		
						150		1,323		
Reverse recovered energy	E_{rec}					25		0,070		mWs
						125		0,070		
						150		0,120		
Peak rate of fall of recovery current	$(di_{rr}/dt)_{max}$					25		18427		A/ μs
						125		26726		
						150		30513		



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Characteristic Values

Parameter	Symbol	Conditions					Values			Unit
			V_{GE} [V] V_{GS} [V]	V_{CE} [V] V_{DS} [V] V_F [V]	I_C [A] I_D [A] I_F [A]	T_j [°C]	Min	Typ	Max	

Capacitor (DC)

Static

Capacitance	C							94		nF
Tolerance							-20		20	%
Dissipation factor		$f = 1 \text{ kHz}$				25		25		%

Thermistor

Static

Rated resistance	R					25		22		kΩ
Deviation of R_{100}	$\Delta_{R/R}$	$R_{100} = 1484 \Omega$				100	-5		5	%
Power dissipation	P							5		mW
Power dissipation constant	d					25		1,5		mW/K
B-value	$B_{(25/50)}$	Tol. $\pm 1 \%$						3962		K
B-value	$B_{(25/100)}$	Tol. $\pm 1 \%$						4000		K
Vincotech Thermistor Reference									I	



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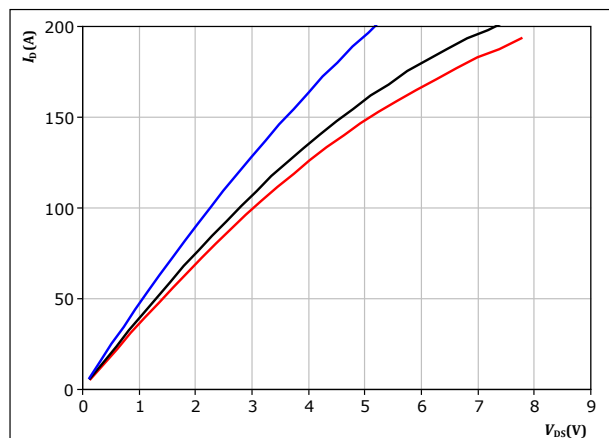
datasheet

H-Bridge Switch - Lo side Characteristics

figure 1. MOSFET

Typical output characteristics

$$I_D = f(V_{DS})$$

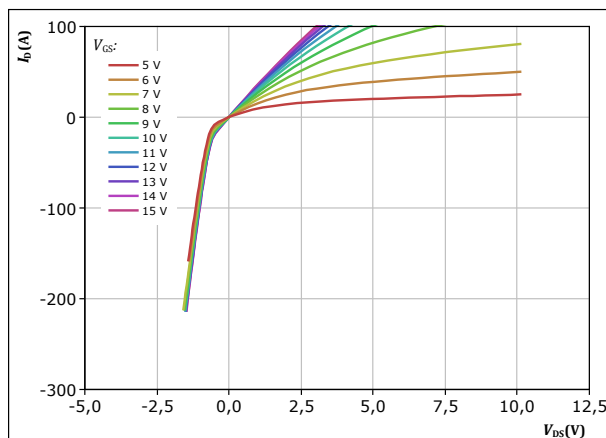


$t_p = 250 \mu s$
 $V_{DS} = 15 V$
 T_j : 25 °C, 125 °C, 150 °C

figure 2. MOSFET

Typical output characteristics

$$I_D = f(V_{DS})$$

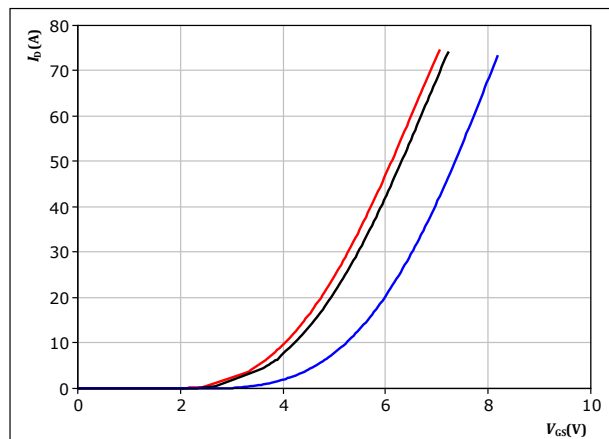


$t_p = 250 \mu s$
 $T_j = 150 \text{ °C}$
 V_{GS} from 5 V to 15 V in steps of 1 V

figure 3. MOSFET

Typical transfer characteristics

$$I_D = f(V_{GS})$$

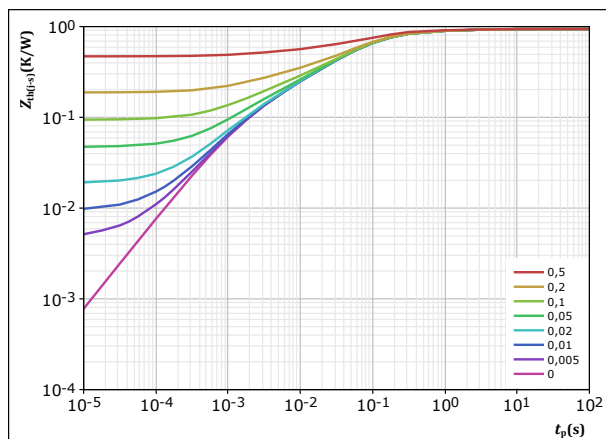


$t_p = 250 \mu s$
 $V_{DS} = 10 V$
 T_j : 25 °C, 125 °C, 150 °C

figure 4. MOSFET

Transient thermal impedance as a function of pulse width

$$Z_{th(j-s)} = f(t_p)$$



$D = t_p / T$
 $R_{th(j-s)} = 0,94 \text{ K/W}$
MOSFET thermal model values

$R \text{ (K/W)}$	$\tau \text{ (s)}$
4,21E-02	2,99E+00
1,28E-01	4,21E-01
5,28E-01	7,51E-02
1,69E-01	9,86E-03
7,30E-02	1,37E-03



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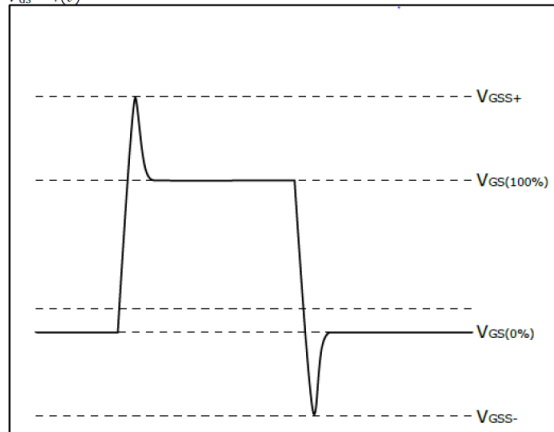
H-Bridge Switch - Lo side Characteristics

figure 5.

MOSFET

Gate maximum operating boundaries

$$V_{GS} = f(t)$$



At

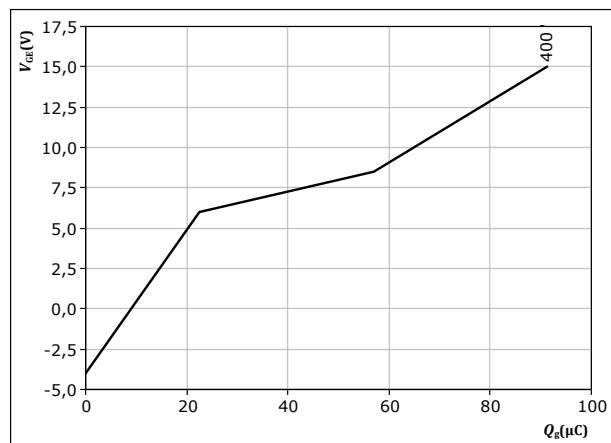
$V_{GSS+} =$	19 V
$V_{GS(100\%)} =$	15 V
$V_{GS(0\%)} =$	-4 V
$V_{GSS-} =$	-8 V

figure 6.

MOSFET

Gate voltage vs gate charge

$$V_{GS} = f(Q_g)$$



At



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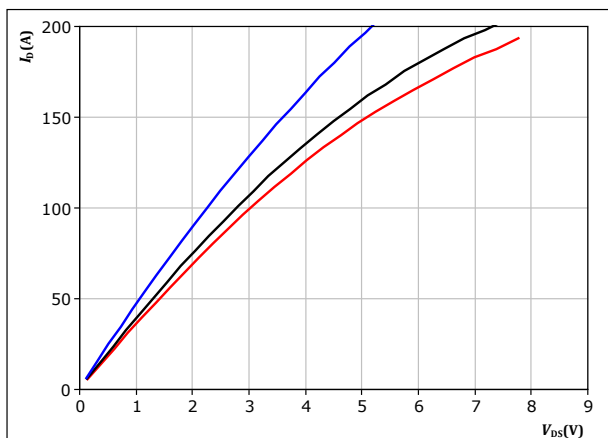
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H-Bridge Switch - Hi side Characteristics

figure 7. MOSFET

Typical output characteristics

$$I_D = f(V_{DS})$$

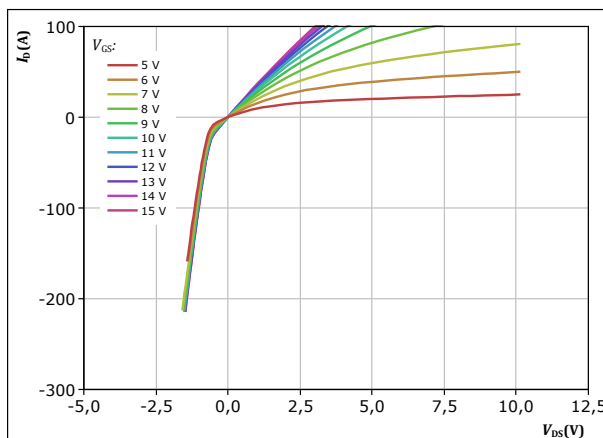


$t_p = 250 \mu s$
 $V_{GS} = 15 V$
 T_j : 25 °C, 125 °C, 150 °C

figure 8. MOSFET

Typical output characteristics

$$I_D = f(V_{DS})$$

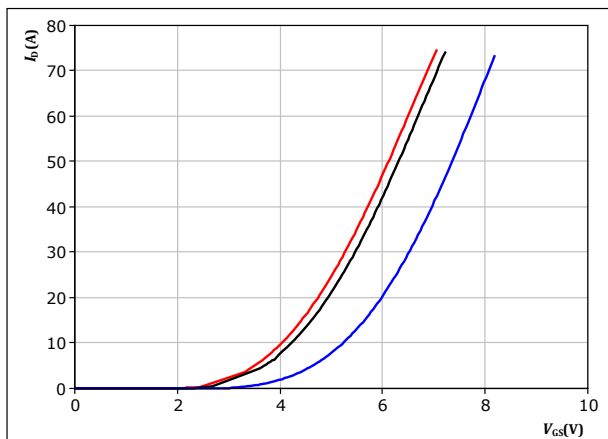


$t_p = 250 \mu s$
 $T_j = 150 \text{ °C}$
 V_{GS} from 5 V to 15 V in steps of 1 V

figure 9. MOSFET

Typical transfer characteristics

$$I_D = f(V_{GS})$$

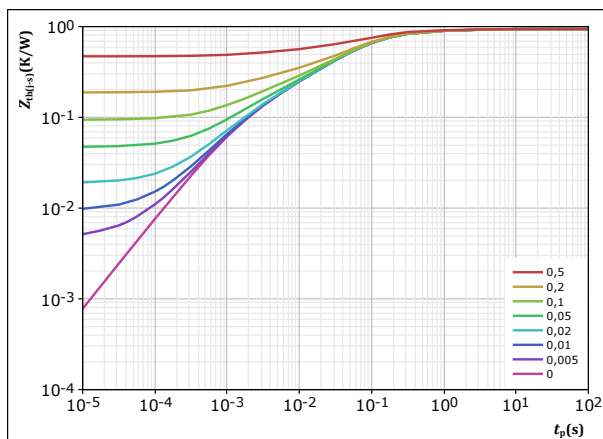


$t_p = 250 \mu s$
 $V_{DS} = 10 V$
 T_j : 25 °C, 125 °C, 150 °C

figure 10. MOSFET

Transient thermal impedance as a function of pulse width

$$Z_{th(j-s)} = f(t_p)$$



$D = t_p / T = 0.94$
 $R_{th(j-s)} = 0.94 \text{ K/W}$
MOSFET thermal model values

$R \text{ (K/W)}$	$\tau \text{ (s)}$
4,21E-02	2,99E+00
1,28E-01	4,21E-01
5,28E-01	7,51E-02
1,69E-01	9,86E-03
7,30E-02	1,37E-03



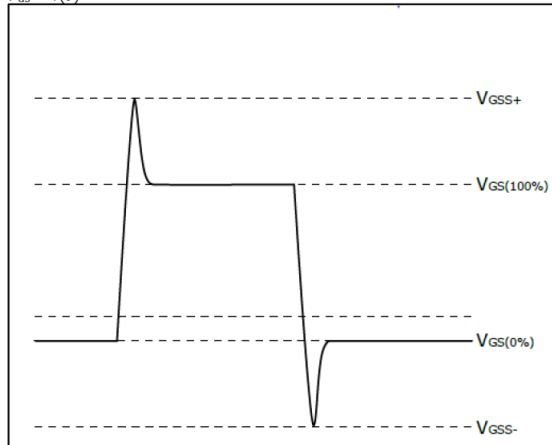
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H-Bridge Switch - Hi side Characteristics

figure 11. MOSFET

Gate maximum operating boundaries

$V_{GS} = f(t)$



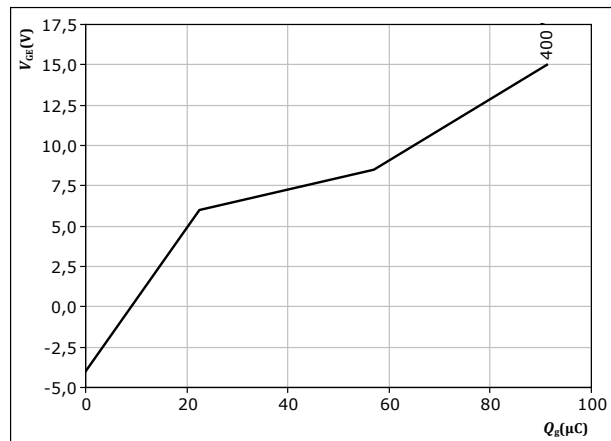
At

$V_{GS+} =$	19 V
$V_{GS(100\%)} =$	15 V
$V_{GS(0\%)} =$	-4 V
$V_{GS-} =$	-8 V

figure 12. MOSFET

Gate voltage vs gate charge

$V_{GS} = f(Q_g)$



At



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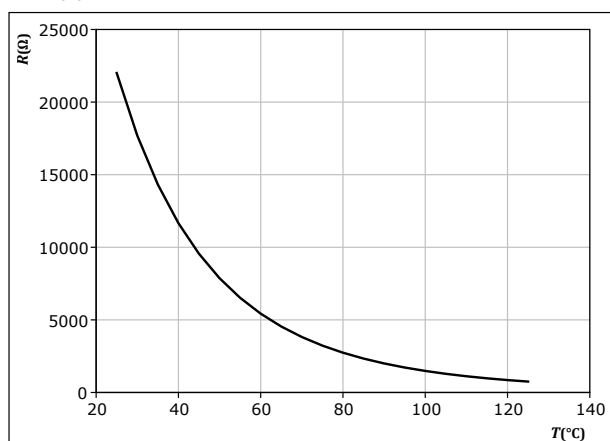
Thermistor Characteristics

figure 13.

Thermistor

Typical NTC characteristic as function of temperature

$$R_T = f(T)$$





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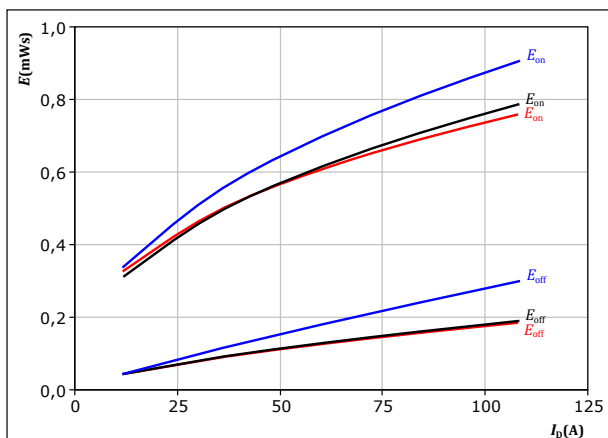
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datasheet

H-Bridge Switching Characteristics - Lo side

figure 14. MOSFET

Typical switching energy losses as a function of drain current

$$E = f(I_D)$$



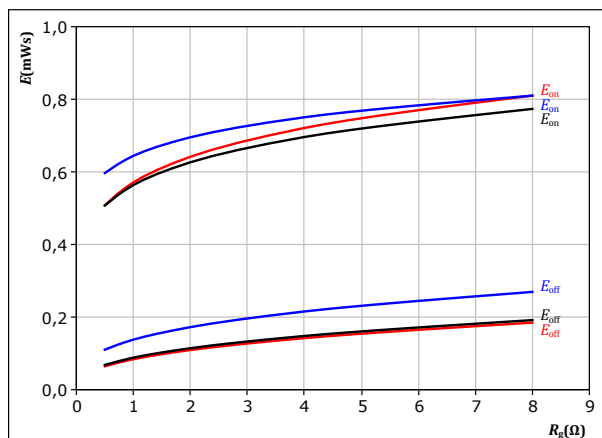
With an inductive load at

$V_{DS} =$	600	V	$T_j:$	25 °C
$V_{GS} =$	-5/15	V		125 °C
$R_{gon} =$	2	Ω		150 °C
$R_{goff} =$	2	Ω		

figure 15. MOSFET

Typical switching energy losses as a function of gate resistor

$$E = f(R_g)$$



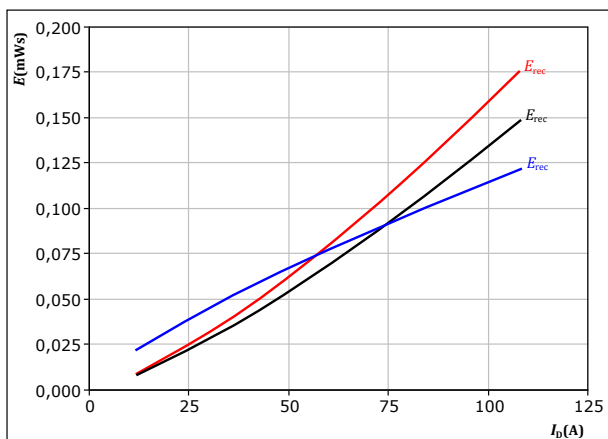
With an inductive load at

$V_{DS} =$	600	V	$T_j:$	25 °C
$V_{GS} =$	-5/15	V		125 °C
$I_D =$	60	A		150 °C

figure 16. MOSFET

Typical reverse recovered energy loss as a function of drain current

$$E_{rec} = f(I_D)$$



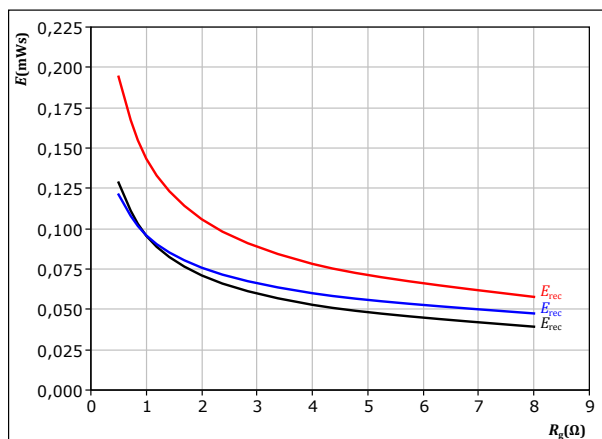
With an inductive load at

$V_{DS} =$	600	V	$T_j:$	25 °C
$V_{GS} =$	-5/15	V		125 °C
$R_{gon} =$	2	Ω		150 °C

figure 17. MOSFET

Typical reverse recovered energy loss as a function of gate resistor

$$E_{rec} = f(R_g)$$



With an inductive load at

$V_{DS} =$	600	V	$T_j:$	25 °C
$V_{GS} =$	-5/15	V		125 °C
$I_D =$	60	A		150 °C



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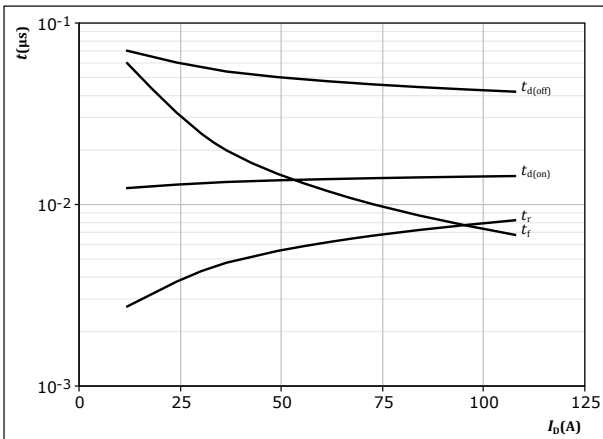
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H-Bridge Switching Characteristics - Lo side

figure 18.

MOSFET

Typical switching times as a function of drain current
 $t = f(I_D)$



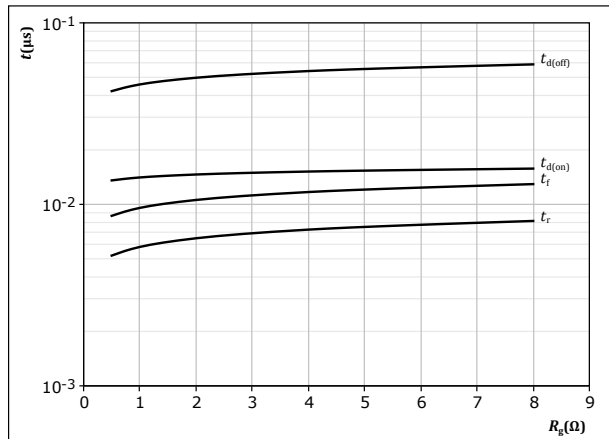
With an inductive load at

$T_j = 150$ °C
 $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $R_{gon} = 2$ Ω
 $R_{goff} = 2$ Ω

figure 19.

MOSFET

Typical switching times as a function of gate resistor
 $t = f(R_g)$



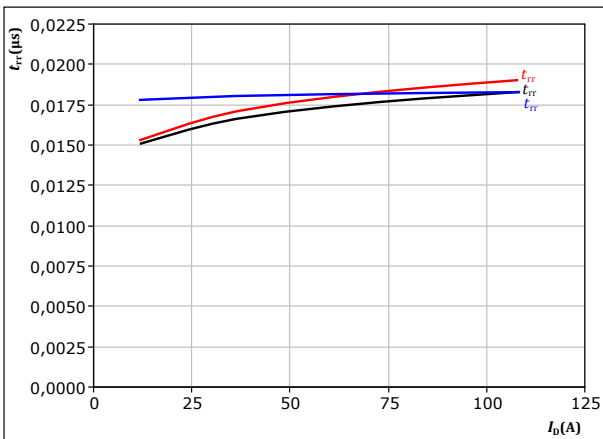
With an inductive load at

$T_j = 150$ °C
 $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $I_D = 60$ A

figure 20.

MOSFET

Typical reverse recovery time as a function of drain current
 $t_{rr} = f(I_D)$



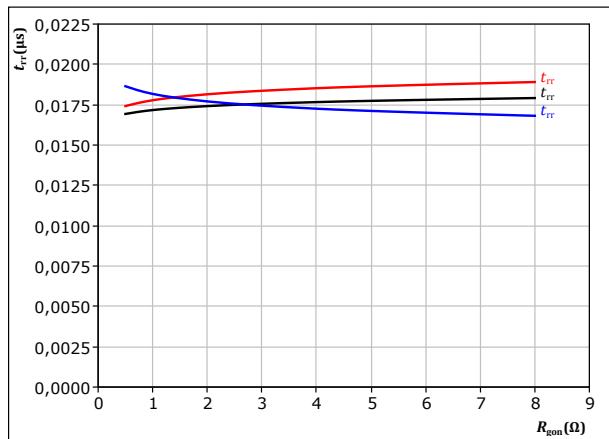
At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $R_{gon} = 2$ Ω

T_j : — 25 °C
— 125 °C
— 150 °C

figure 21.

MOSFET

Typical reverse recovery time as a function of turn on gate resistor
 $t_{rr} = f(R_{gon})$



At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $I_D = 60$ A

T_j : — 25 °C
— 125 °C
— 150 °C



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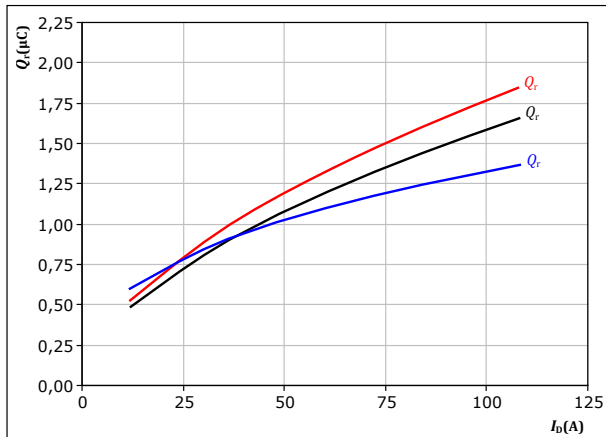
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H-Bridge Switching Characteristics - Lo side

figure 22. MOSFET

Typical recovered charge as a function of drain current

$$Q_r = f(I_D)$$

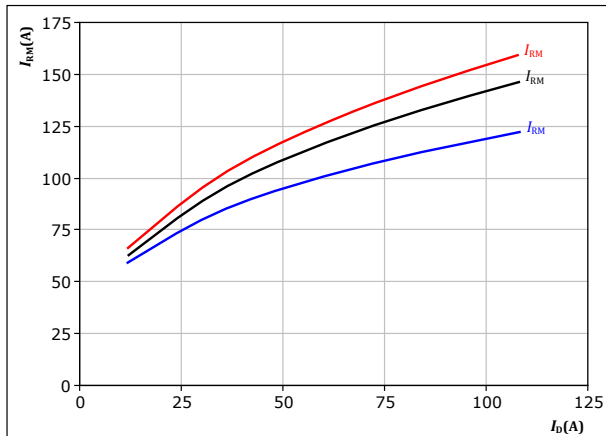


At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $R_{gon} = 2$ Ω
 T_j : 25 °C
125 °C
150 °C

figure 24. MOSFET

Typical peak reverse recovery current as a function of drain current

$$I_{RM} = f(I_D)$$

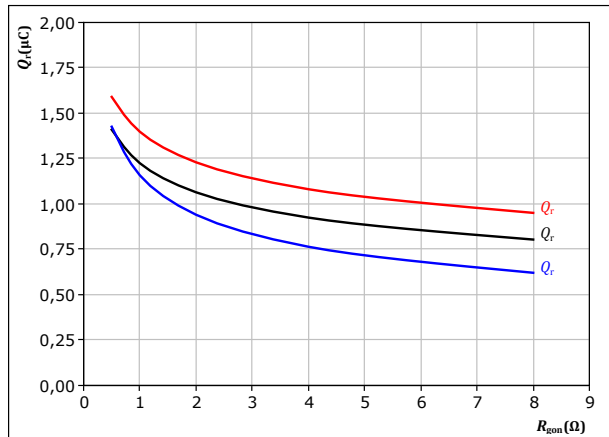


At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $R_{gon} = 2$ Ω
 T_j : 25 °C
125 °C
150 °C

figure 23. MOSFET

Typical recovered charge as a function of turn on gate resistor

$$Q_r = f(R_{gon})$$

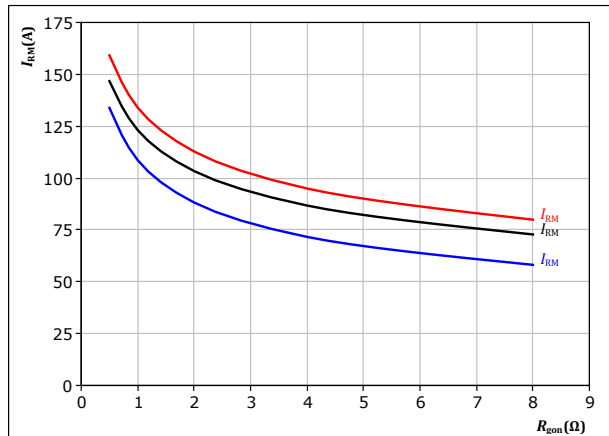


At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $I_D = 60$ A
 T_j : 25 °C
125 °C
150 °C

figure 25. MOSFET

Typical peak reverse recovery current as a function of turn on gate resistor

$$I_{RM} = f(R_{gon})$$



At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $I_D = 60$ A
 T_j : 25 °C
125 °C
150 °C



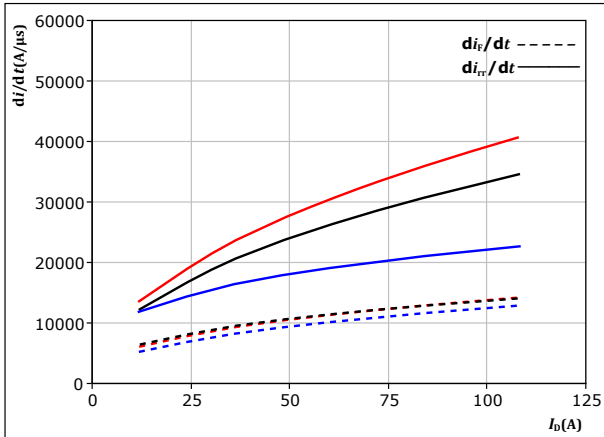
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datasheet

H-Bridge Switching Characteristics - Lo side

figure 26. MOSFET

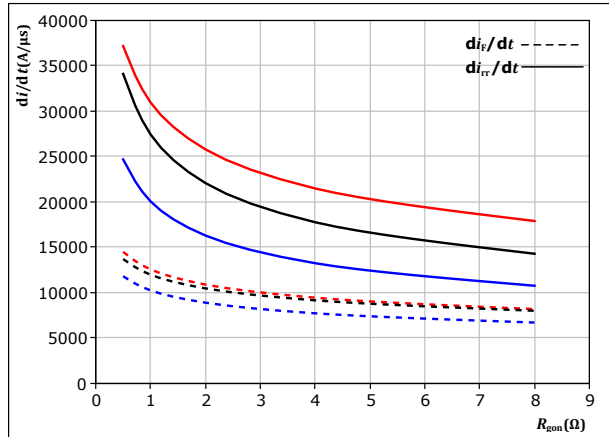
Typical rate of fall of forward and reverse recovery current as a function of drain current
 $di_f/dt, di_r/dt = f(I_D)$



At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $R_{gon} = 2$ Ω
 T_j : 25 °C (blue), 125 °C (black), 150 °C (red)

figure 27. MOSFET

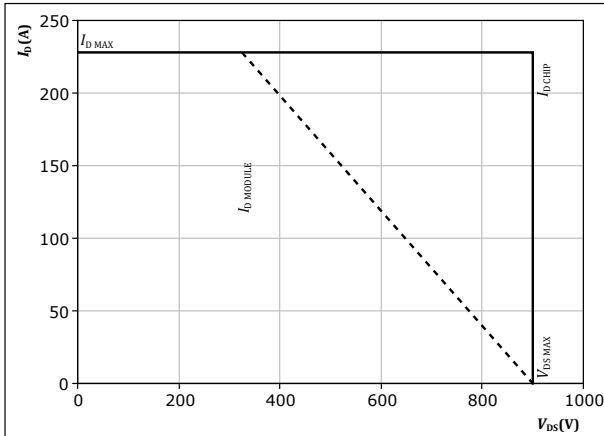
Typical rate of fall of forward and reverse recovery current as a function of turn on gate resistor
 $di_f/dt, di_r/dt = f(R_{gon})$



At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $I_D = 60$ A
 T_j : 25 °C (blue), 125 °C (black), 150 °C (red)

figure 28. MOSFET

Reverse bias safe operating area
 $I_D = f(V_{DS})$



At $T_j = 150$ °C
 $R_{gon} = 2$ Ω
 $R_{goff} = 2$ Ω



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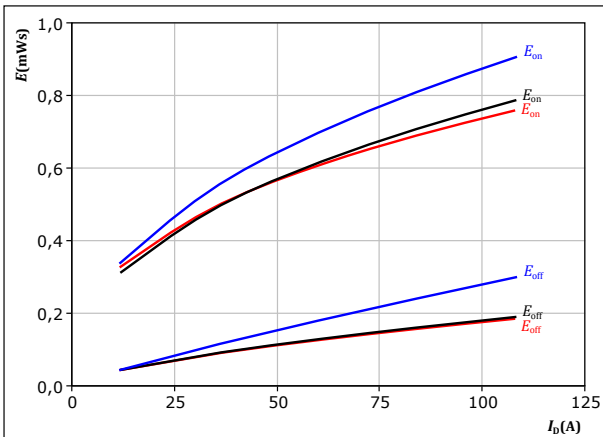
10-PC094PB017ME02-L620F36Y datasheet

H-Bridge Switching Characteristics - Hi side

figure 29. MOSFET

Typical switching energy losses as a function of drain current

$$E = f(I_D)$$



With an inductive load at

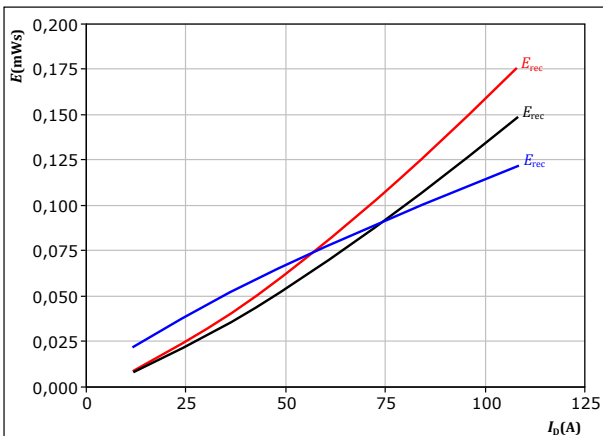
$V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $R_{gon} = 2$ Ω
 $R_{goff} = 2$ Ω

T_j : 25 °C
125 °C
150 °C

figure 31. MOSFET

Typical reverse recovered energy loss as a function of drain current

$$E_{rec} = f(I_D)$$



With an inductive load at

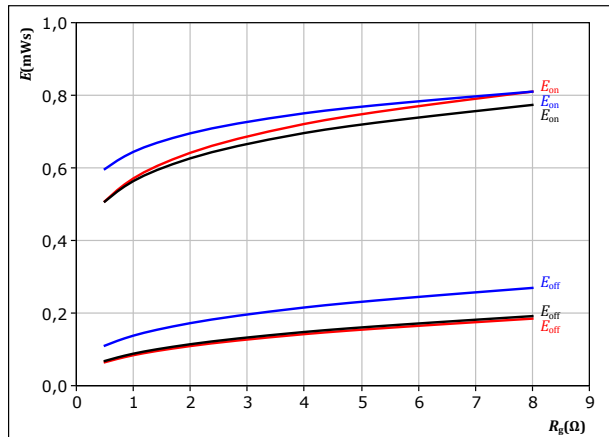
$V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $R_{gon} = 2$ Ω

T_j : 25 °C
125 °C
150 °C

figure 30. MOSFET

Typical switching energy losses as a function of gate resistor

$$E = f(R_g)$$



With an inductive load at

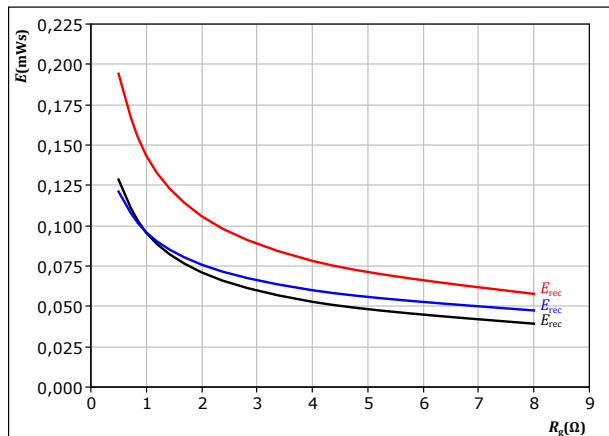
$V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $I_D = 60$ A

T_j : 25 °C
125 °C
150 °C

figure 32. MOSFET

Typical reverse recovered energy loss as a function of gate resistor

$$E_{rec} = f(R_g)$$



With an inductive load at

$V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $I_D = 60$ A

T_j : 25 °C
125 °C
150 °C



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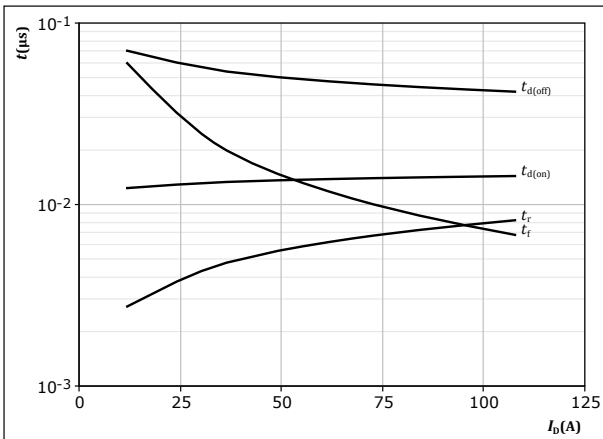
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datasheet

H-Bridge Switching Characteristics - Hi side

figure 33.

MOSFET

Typical switching times as a function of drain current
 $t = f(I_D)$



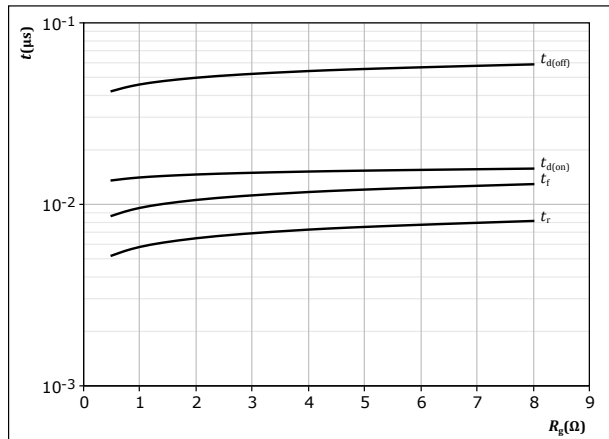
With an inductive load at

$T_j = 150$ °C
 $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $R_{gon} = 2$ Ω
 $R_{goff} = 2$ Ω

figure 34.

MOSFET

Typical switching times as a function of gate resistor
 $t = f(R_g)$



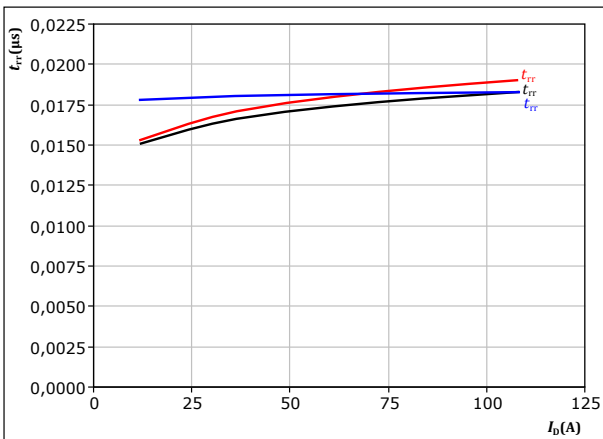
With an inductive load at

$T_j = 150$ °C
 $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $I_D = 60$ A

figure 35.

MOSFET

Typical reverse recovery time as a function of drain current
 $t_{rr} = f(I_D)$



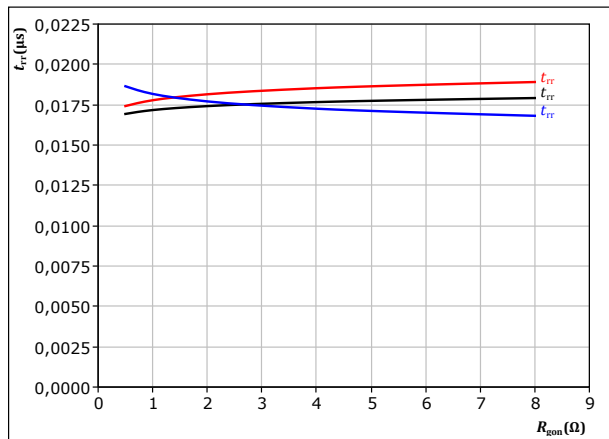
At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $R_{gon} = 2$ Ω

T_j : — 25 °C
— 125 °C
— 150 °C

figure 36.

MOSFET

Typical reverse recovery time as a function of turn on gate resistor
 $t_{rr} = f(R_{gon})$



At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $I_D = 60$ A

T_j : — 25 °C
— 125 °C
— 150 °C



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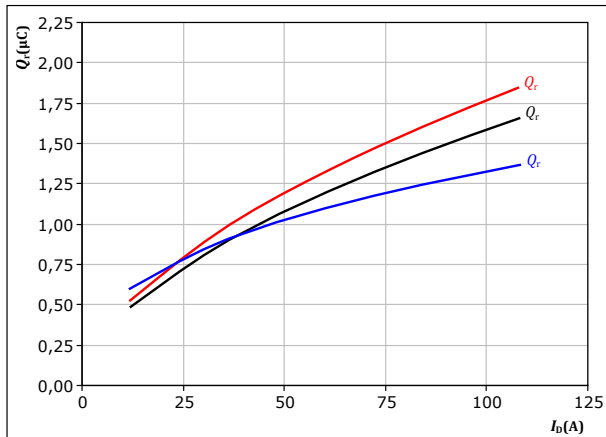
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H-Bridge Switching Characteristics - Hi side

figure 37. MOSFET

Typical recovered charge as a function of drain current

$$Q_r = f(I_D)$$

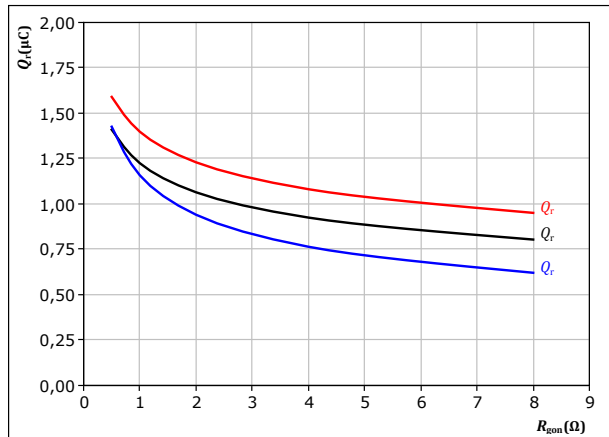


At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $R_{gon} = 2$ Ω
 T_j : 25 °C
125 °C
150 °C

figure 38. MOSFET

Typical recovered charge as a function of turn on gate resistor

$$Q_r = f(R_{gon})$$

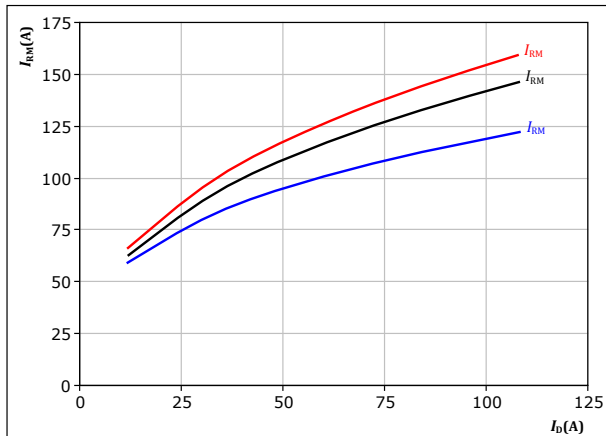


At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $I_D = 60$ A
 T_j : 25 °C
125 °C
150 °C

figure 39. MOSFET

Typical peak reverse recovery current as a function of drain current

$$I_{RM} = f(I_D)$$

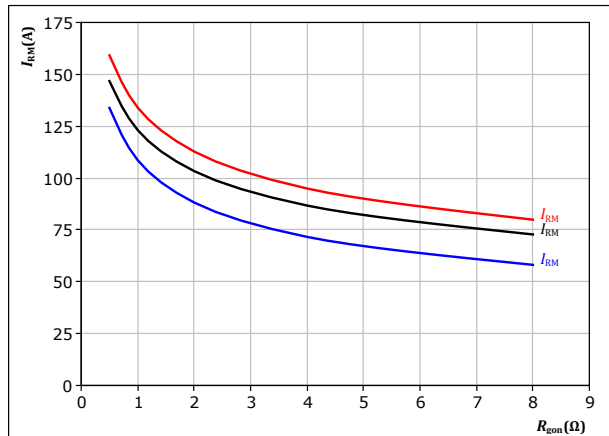


At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $R_{gon} = 2$ Ω
 T_j : 25 °C
125 °C
150 °C

figure 40. MOSFET

Typical peak reverse recovery current as a function of turn on gate resistor

$$I_{RM} = f(R_{gon})$$



At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $I_D = 60$ A
 T_j : 25 °C
125 °C
150 °C



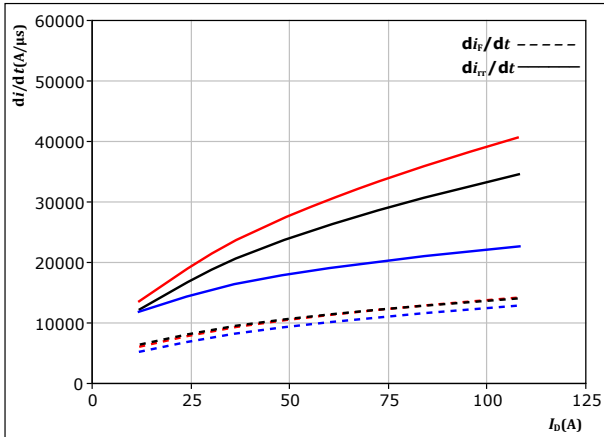
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datasheet

H-Bridge Switching Characteristics - Hi side

figure 41. MOSFET

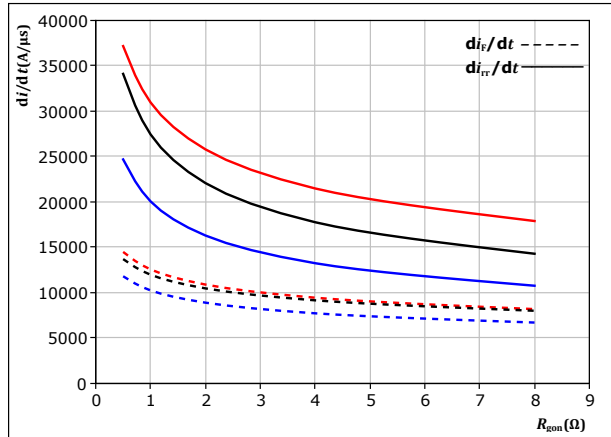
Typical rate of fall of forward and reverse recovery current as a function of drain current
 $di_f/dt, di_r/dt = f(I_D)$



At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $R_{gon} = 2$ Ω
 T_j : 25 °C (blue), 125 °C (black), 150 °C (red)

figure 42. MOSFET

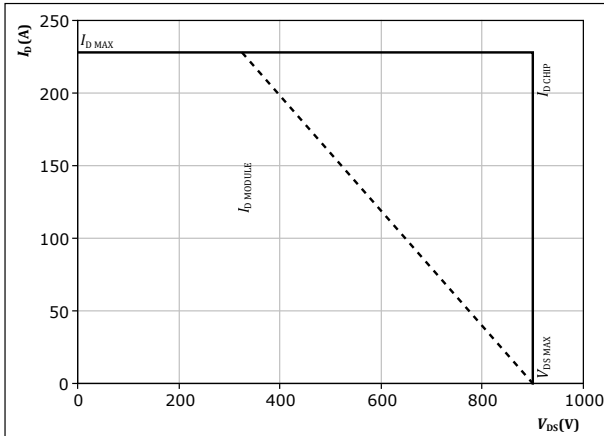
Typical rate of fall of forward and reverse recovery current as a function of turn on gate resistor
 $di_f/dt, di_r/dt = f(R_{gon})$



At $V_{DS} = 600$ V
 $V_{GS} = -5/15$ V
 $I_D = 60$ A
 T_j : 25 °C (blue), 125 °C (black), 150 °C (red)

figure 43. MOSFET

Reverse bias safe operating area
 $I_D = f(V_{DS})$



At $T_j = 150$ °C
 $R_{gon} = 2$ Ω
 $R_{goff} = 2$ Ω



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Switching Definitions

figure 44. MOSFET

Turn-off Switching Waveforms & definition of t_{doff} , t_{Eoff} (t_{Eoff} = integrating time for E_{off})

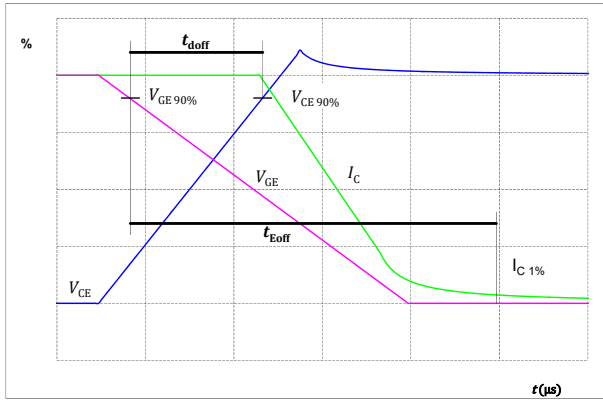


figure 45. MOSFET

Turn-on Switching Waveforms & definition of t_{don} , t_{Eon} (t_{Eon} = integrating time for E_{on})

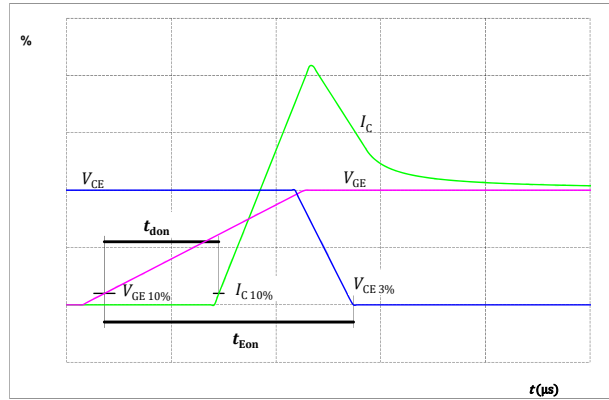


figure 46. MOSFET

Turn-off Switching Waveforms & definition of t_f

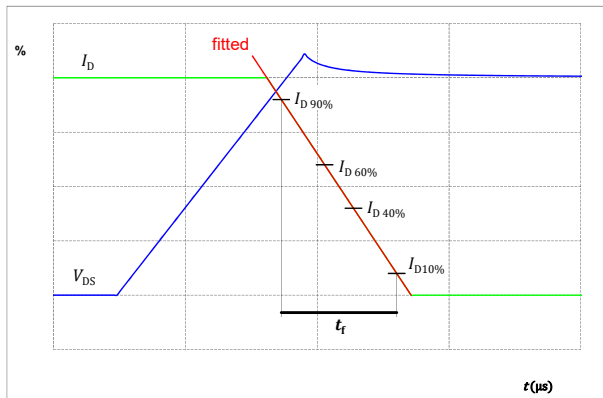
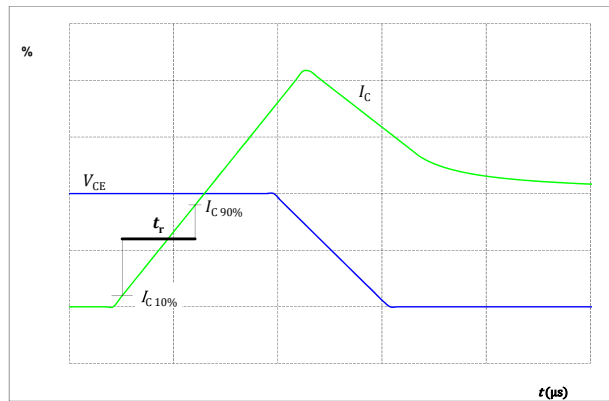


figure 47. MOSFET

Turn-on Switching Waveforms & definition of t_r





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Switching Definitions

figure 48.

FWD

Turn-off Switching Waveforms & definition of t_{tr}

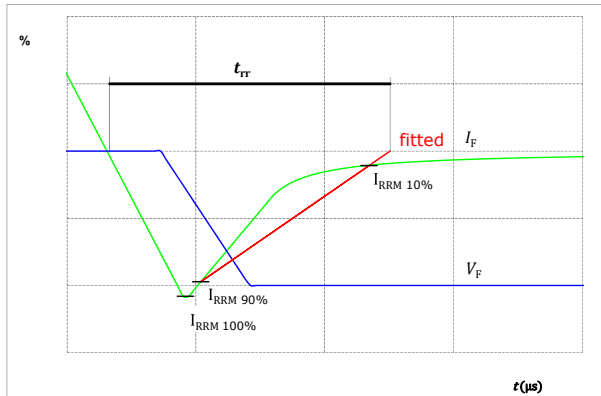


figure 49.

FWD

Turn-on Switching Waveforms & definition of t_{Qr} (t_{Qr} = integrating time for Q_r)

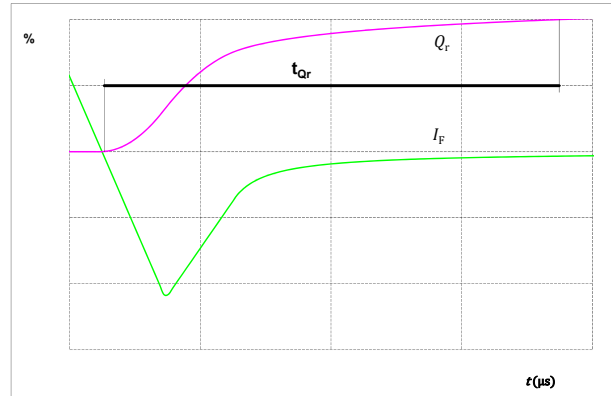
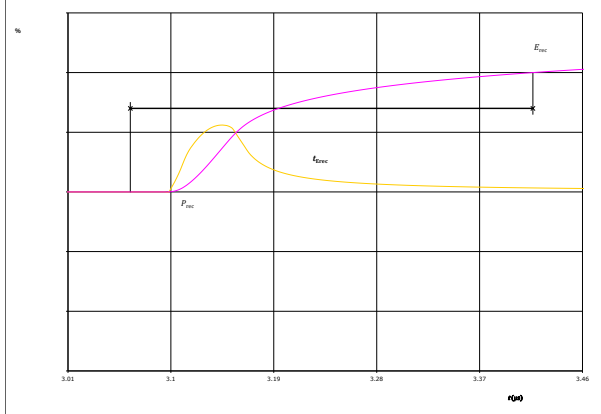


figure 50.

FWD

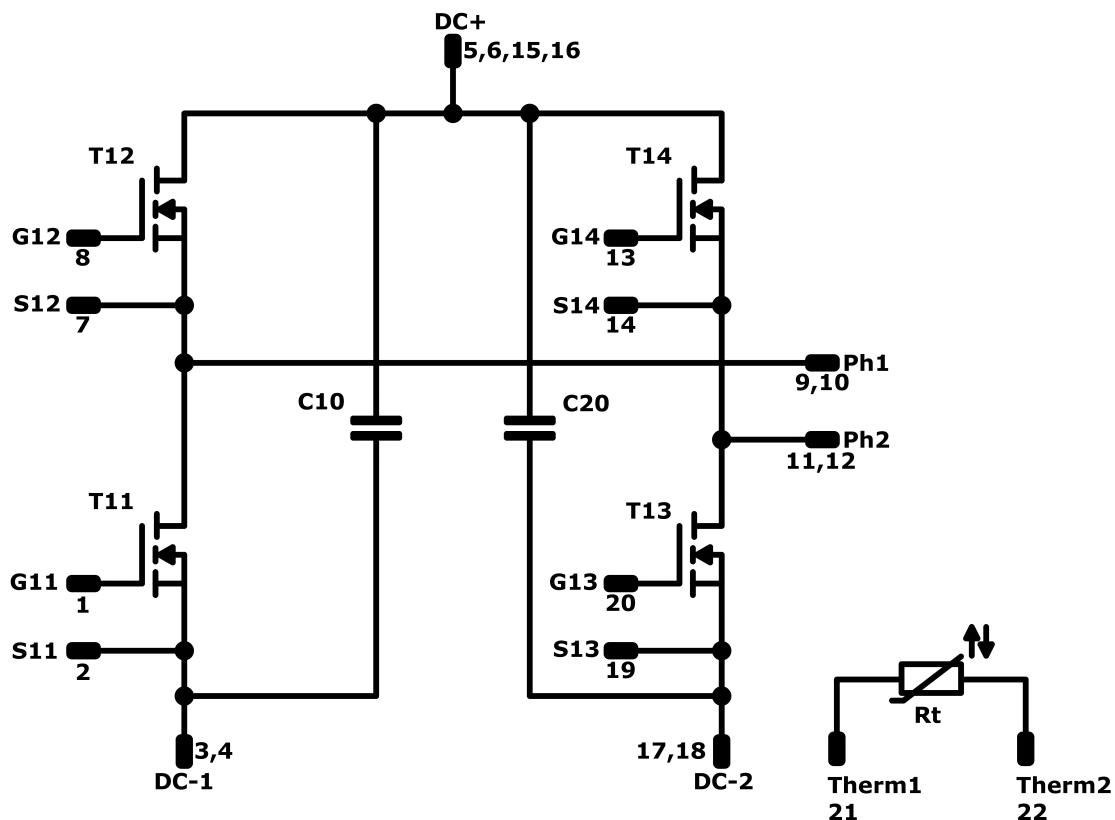
Turn-on Switching Waveforms & definition of t_{Erec} (t_{Erec} = integrating time for E_{rec})





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Pinout



Identification

ID	Component	Voltage	Current	Function	Comment
T11, T13	MOSFET	900 V	21,67 mΩ	H-Bridge Switch - Lo side	
T12, T14	MOSFET	900 V	21,67 mΩ	H-Bridge Switch - Hi side	
C10, C20	Capacitor	1000 V		Capacitor (DC)	
Rt	Thermistor			Thermistor	



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datasheet

Packaging instruction				
Standard packaging quantity (SPQ) 135	>SPQ	Standard	<SPQ	Sample
Handling instruction				
Handling instructions for <i>flow 0</i> packages see vincotech.com website.				
Package data				
Package data for <i>flow 0</i> packages see vincotech.com website.				
UL recognition and file number				
This device is certified according to UL 1557 standard, UL file number E192116. For more information see vincotech.com website.				

Document No.:	Date:	Modification:	Pages
10-PC094PB017ME02-L620F36Y-D2-14	16 Feb. 2020	Correct Vds on the Switching curves	

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