Vincotech

10-PZ124PA062MR-L628F18Y
datasheet

fastPACK 0 SiC **1200 V / 62 mΩ**

Topology features

- Kelvin Emitter for improved switching performance
- Integrated DC capacitor
- Open Emitter configuration
- Temperature sensor

Component features

- Easy paralleling
- Low on-resistance
- Fast switching speed
- Fast recovery body diode

Housing features

- Base isolation: Al_2O_3
- Clip-in, reliable mechanical connection, qualified for wave soldering
- Convex shaped substrate for superior thermal contact
- Thermo-mechanical push-and-pull force relief
- Press-fit pin
- Reliable cold welding connection

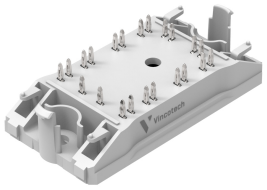
Target applications

- Power Supply
- UPS
- Welding & Cutting

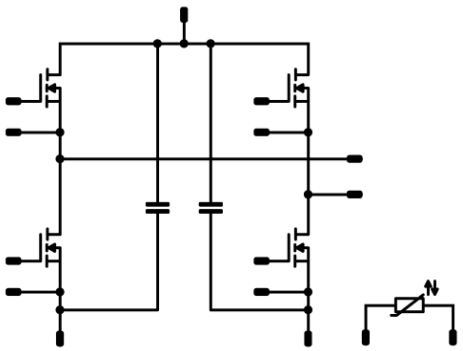
Types

- 10-PZ124PA062MR-L628F18Y

flow 0 12 mm housing



Schematic



Maximum Ratings

T_j = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	Value	Unit
Inverter Switch - Lo Side				
Drain-source voltage	V_{DSS}		1200	V
Drain current (DC current)	I_D	T_j = T_{jmax} T_s = 80 °C	18	A
Peak drain current	I_{DM}	t_p limited by T_{jmax}	52	A
Total power dissipation	P_{tot}	T_j = T_{jmax} T_s = 80 °C	52	W
Gate-source voltage	V_{GSS}		-4 / 21	V
		dynamic	-4 / 23	
Maximum Junction Temperature	T_{jmax}		175	°C
Inverter Switch - Hi Side				
Drain-source voltage	V_{DSS}		1200	V
Drain current (DC current)	I_D	T_j = T_{jmax} T_s = 80 °C	18	A
Peak drain current	I_{DM}	t_p limited by T_{jmax}	52	A
Total power dissipation	P_{tot}	T_j = T_{jmax} T_s = 80 °C	52	W
Gate-source voltage	V_{GSS}		-4 / 21	V
		dynamic	-4 / 23	
Maximum Junction Temperature	T_{jmax}		175	°C
Capacitor				
Maximum DC voltage	V_{MAX}		1000	V
Operation Temperature	T_{op}		-55 ... 125	°C

Maximum Ratings

T_j = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	Value	Unit
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 s	6000	V
Isolation voltage	V_{isol}	AC Voltage t_p = 1 min	2500	V
Creepage distance			>12,7	mm
Clearance			9,15	mm
Comparative Tracking Index	CTI		≥ 200	

*100 % tested in production

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	
Inverter Switch - Lo Side										
Static										
Drain-source on-state resistance	$r_{DS(on)}$		18		12	25 125 150		73,5 119 137	78[1]	mΩ
Gate-source threshold voltage	$V_{GS(th)}$				0,00645	25	2,8	3,5	4,8	V
Gate to Source Leakage Current	I_{GSS}		21	0		25			100	nA
Zero Gate Voltage Drain Current	I_{DSS}		0	1200		25		1	80	µA
Internal gate resistance	r_g							4		Ω
Gate charge	Q_g		0/18	800	12	25		64		nC
Gate to source charge	Q_{GS}							14		
Gate to drain charge	Q_{GD}							17		
Short-circuit input capacitance	C_{iss}	f = 1 Mhz	0	800	0	25		1498		pF
Short-circuit output capacitance	C_{oss}							45		
Reverse transfer capacitance	C_{rss}							3		
Diode forward voltage	V_{SD}		0		12	25		3,3		V
Thermal										
Thermal resistance junction to sink[2]	$R_{th(j-s)}$	λ_{paste} = 3,4 W/mK (PSX)						1,84		K/W

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	
Dynamic										
Turn-on delay time	$t_{d(on)}$	R_{gon} = 8 Ω R_{goff} = 8 Ω	0/18	600	16	25 125 150		11,52 9,92 9,6		ns
Rise time	t_r					25 125 150		7,36 7,36 7,36		ns
Turn-off delay time	$t_{d(off)}$					25 125 150		61,44 68,48 70,08		ns
Fall time	t_f					25 125 150		20,23 20,55 21,88		ns
Turn-on energy (per pulse)	E_{on}	Q_{rFWD}=0,248 µC Q_{rFWD}=0,235 µC Q_{rFWD}=0,245 µC				25 125 150		0,267 0,248 0,249		mWs
Turn-off energy (per pulse)	E_{off}					25 125 150		0,047 0,05 0,05		mWs
Peak recovery current	I_{RRM}	di/dt=2730 A/µs di/dt=2845 A/µs di/dt=2850 A/µs				25 125 150		20,06 20,8 21,28		A
Reverse recovery time	t_{rr}					25 125 150		28,94 28,07 28,15		ns
Recovered charge	Q_r					25 125 150		0,248 0,235 0,245		µC
Reverse recovered energy	E_{rec}					25 125 150		0,067 0,067 0,072		mWs
Peak rate of fall of recovery current	$(di_{rf}/dt)_{max}$					25 125 150		2569 2589 2191		A/µs

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	
Inverter Switch - Hi Side										
Static										
Drain-source on-state resistance	$r_{DS(on)}$		18		12	25 125 150		73,5 119 137	78[1]	mΩ
Gate-source threshold voltage	$V_{GS(th)}$				0,00645	25	2,8	3,5	4,8	V
Gate to Source Leakage Current	I_{GSS}		21	0		25			100	nA
Zero Gate Voltage Drain Current	I_{DSS}		0	1200		25		1	80	µA
Internal gate resistance	r_g							4		Ω
Gate charge	Q_g		0/18	800	12	25		64		nC
Gate to source charge	Q_{GS}							14		
Gate to drain charge	Q_{GD}							17		
Short-circuit input capacitance	C_{iss}	f = 1 Mhz	0	800	0	25		1498		pF
Short-circuit output capacitance	C_{oss}							45		
Reverse transfer capacitance	C_{rss}							3		
Diode forward voltage	V_{SD}		0		12	25		3,3		V
Thermal										
Thermal resistance junction to sink[2]	$R_{th(j-s)}$	λ_{paste} = 3,4 W/mK (PSX)						1,84		K/W

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	
Dynamic										
Turn-on delay time	$t_{d(on)}$	R_{gon} = 8 Ω R_{goff} = 8 Ω	0/18	600	16	25 125 150		11,52 9,92 9,6		ns
Rise time	t_r					25 125 150		7,36 7,36 7,36		ns
Turn-off delay time	$t_{d(off)}$					25 125 150		61,44 68,48 70,08		ns
Fall time	t_f					25 125 150		20,23 20,55 21,88		ns
Turn-on energy (per pulse)	E_{on}	Q_{rFWD}=0,248 µC Q_{rFWD}=0,235 µC Q_{rFWD}=0,245 µC				25 125 150		0,267 0,248 0,249		mWs
Turn-off energy (per pulse)	E_{off}					25 125 150		0,047 0,05 0,05		mWs
Peak recovery current	I_{RRM}	di/dt=2730 A/µs di/dt=2845 A/µs di/dt=2850 A/µs				25 125 150		20,06 20,8 21,28		A
Reverse recovery time	t_{rr}					25 125 150		28,94 28,07 28,15		ns
Recovered charge	Q_r					25 125 150		0,248 0,235 0,245		µC
Reverse recovered energy	E_{rec}					25 125 150		0,067 0,067 0,072		mWs
Peak rate of fall of recovery current	$(di_{rf}/dt)_{max}$					25 125 150		2569 2589 2191		A/µs

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										
Static										
Capacitance	C	DC bias voltage = 0 V				25		10		nF
Tolerance							-10		10	%
Dissipation factor		f = 1 kHz				25		0,1		%
Thermistor										
Static										
Rated resistance	R					25		22		kΩ
Deviation of R100	$\Delta_{R/R}$	R_{100} = 1484 Ω				100	-5		5	%
Power dissipation	P					25		130		mW
Power dissipation constant	d					25		1,5		mW/K
B-value	$B_{(25/50)}$	Tol. ±1 %						3962		K
B-value	$B_{(25/100)}$	Tol. ±1 %						4000		K
Vincotech Thermistor Reference									I	

(1) Value at chip level

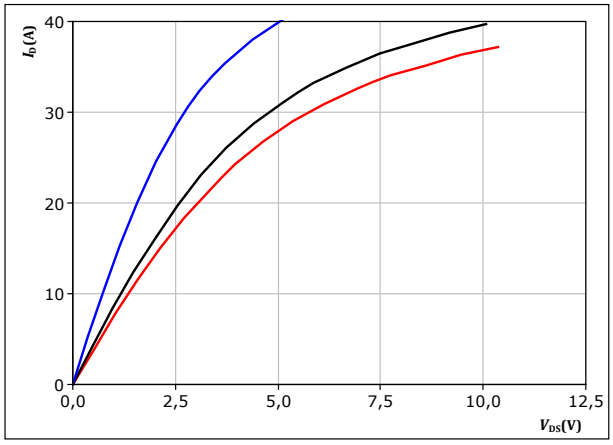
(2) Only valid with pre-applied Vincotech thermal interface material.

Inverter Switch - Lo Side Characteristics

figure 1. **MOSFET**

Typical output characteristics

$I_D = f(V_{DS})$

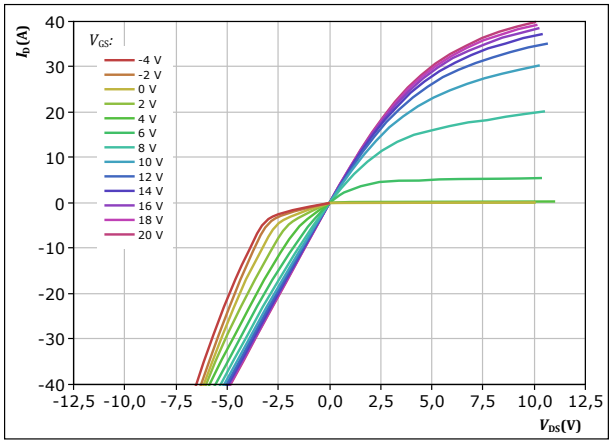


t_p =	250	µs		
V_{GS} =	14	V	T_j:	25 °C
				125 °C
				150 °C

figure 2. **MOSFET**

Typical output characteristics

$I_D = f(V_{DS})$



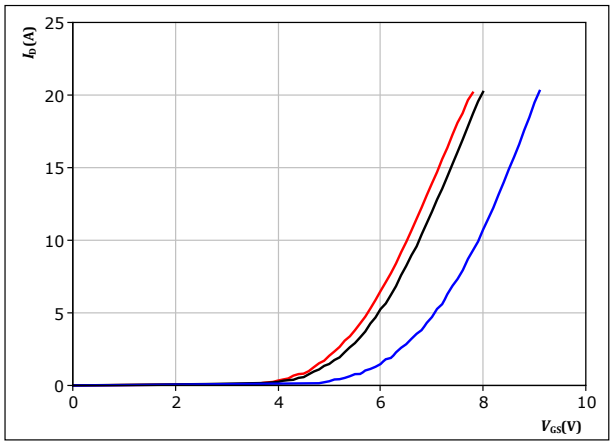
t_p =	250	µs
T_j =	150	°C

V_{GS} from -4 V to 20 V in steps of 2 V

figure 3. **MOSFET**

Typical transfer characteristics

$I_D = f(V_{GS})$

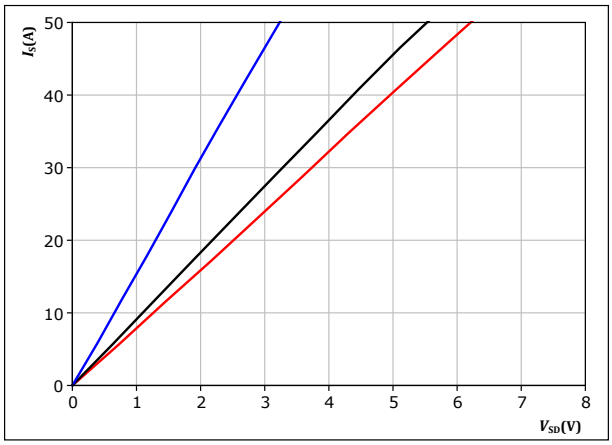


t_p =	250	µs		
V_{DS} =	10	V	T_j:	25 °C
				125 °C
				150 °C

figure 4. **MOSFET**

Typical reverse drain current characteristics

$I_{SD} = f(V_{SD})$



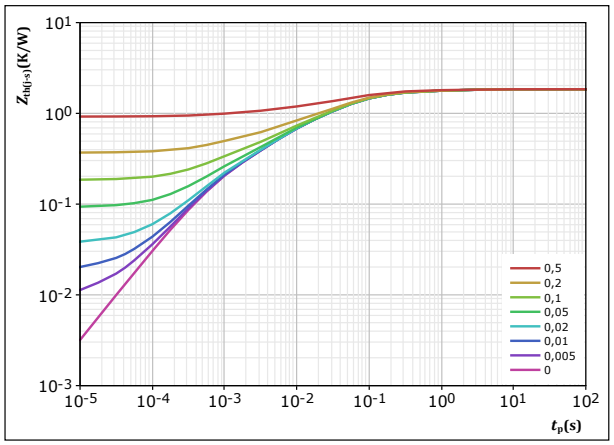
t_p =	250	µs		
V_{GS} =	14	V	T_j:	25 °C
				125 °C
				150 °C

Inverter Switch - Lo Side Characteristics

figure 5. MOSFET

Transient thermal impedance as a function of pulse width

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



$D =$ t_p / T

$R_{th(j-s)} =$ 1,843 K/W

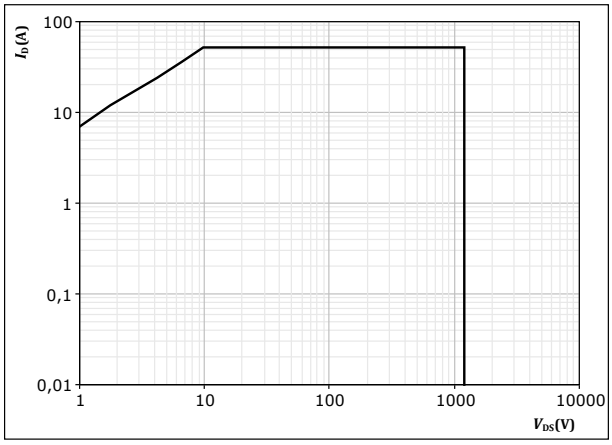
MOSFET thermal model values

R (K/W)	τ (s)
1,10E-01	1,89E+00
4,15E-01	1,55E-01
7,53E-01	3,96E-02
4,02E-01	6,20E-03
1,64E-01	7,03E-04

figure 6. MOSFET

Safe operating area

$I_D = f(V_{DS})$



$D =$ single pulse

$T_s =$ 80 °C

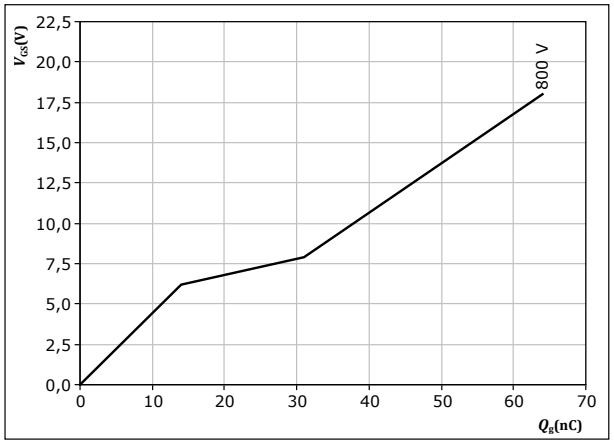
$V_{GS} =$ 14 V

$T_j =$ T_{jmax}

figure 7. MOSFET

Gate voltage vs gate charge

$V_{GS} = f(Q_g)$



$I_D =$ 12 A

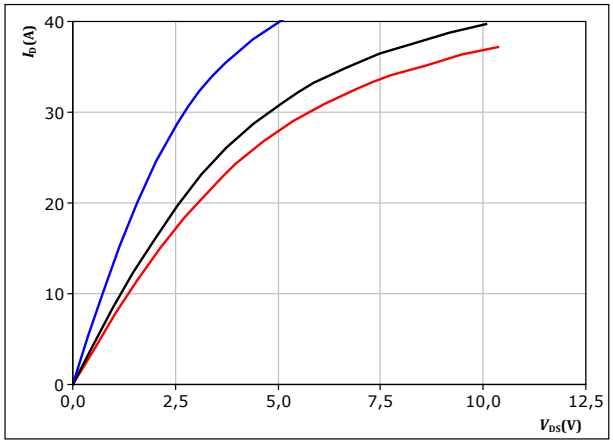
$T_j =$ 25 °C

Inverter Switch - Hi Side Characteristics

figure 8. **MOSFET**

Typical output characteristics

$I_D = f(V_{DS})$

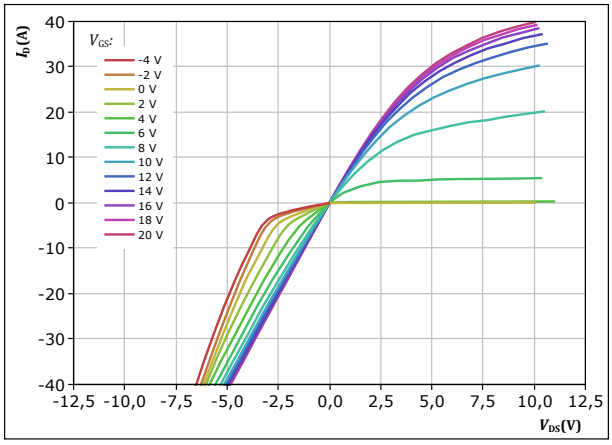


t_p =	250	µs		
V_{GS} =	14	V	T_j:	25 °C
				125 °C
				150 °C

figure 9. **MOSFET**

Typical output characteristics

$I_D = f(V_{DS})$



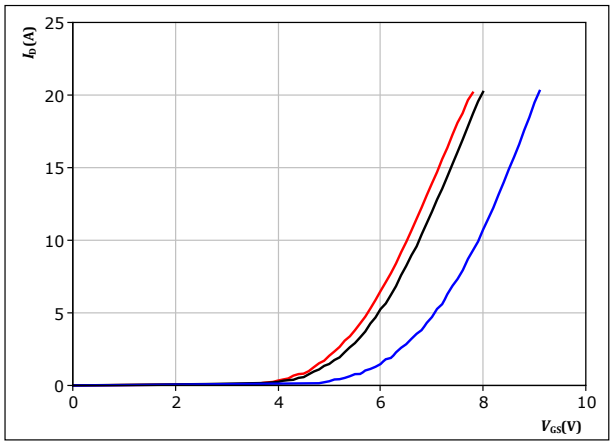
t_p =	250	µs
T_j =	150	°C

V_{GS} from -4 V to 20 V in steps of 2 V

figure 10. **MOSFET**

Typical transfer characteristics

$I_D = f(V_{GS})$

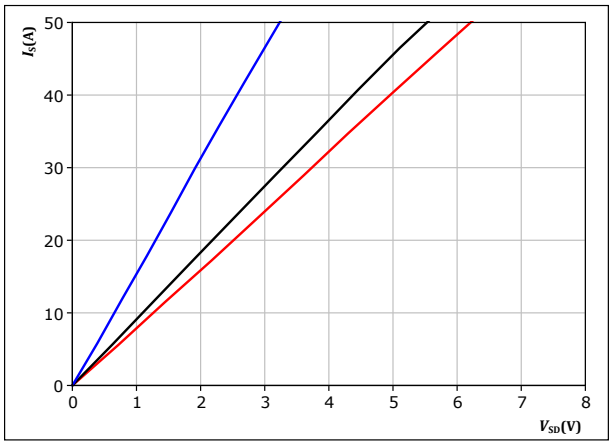


t_p =	250	µs		
V_{DS} =	10	V	T_j:	25 °C
				125 °C
				150 °C

figure 11. **MOSFET**

Typical reverse drain current characteristics

$I_{SD} = f(V_{SD})$



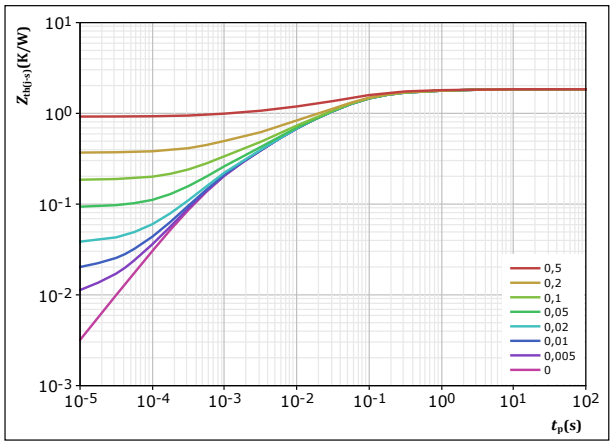
t_p =	250	µs		
V_{GS} =	14	V	T_j:	25 °C
				125 °C
				150 °C

Inverter Switch - Hi Side Characteristics

figure 12. **MOSFET**

Transient thermal impedance as a function of pulse width

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



D =	t_p / T	
$R_{th(j-s)}$ =	1,843	K/W

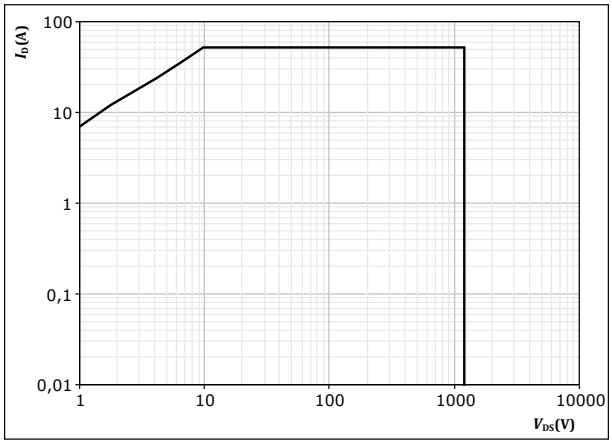
MOSFET thermal model values

R (K/W)	τ (s)
1,10E-01	1,89E+00
4,15E-01	1,55E-01
7,53E-01	3,96E-02
4,02E-01	6,20E-03
1,64E-01	7,03E-04

figure 13. **MOSFET**

Safe operating area

$I_D = f(V_{DS})$

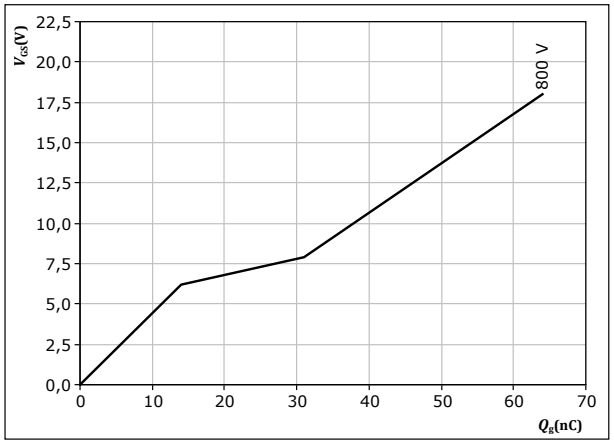


D =	single pulse	
T_s =	80	°C
V_{GS} =	14	V
T_j =	T_{jmax}	

figure 14. **MOSFET**

Gate voltage vs gate charge

$V_{GS} = f(Q_g)$



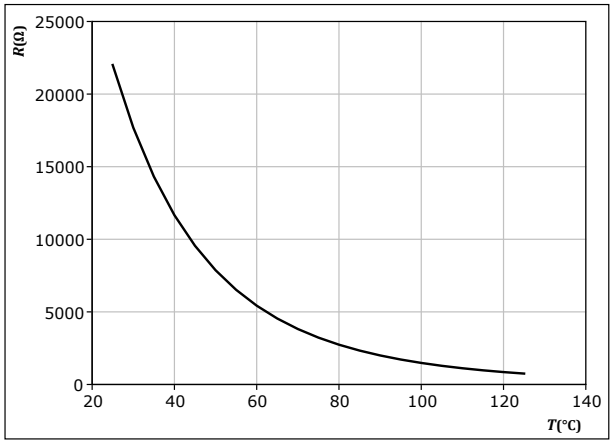
I_D =	12	A
T_j =	25	°C

Thermistor Characteristics

figure 15. **Thermistor**

Typical NTC characteristic as function of temperature

$R_T = f(T)$

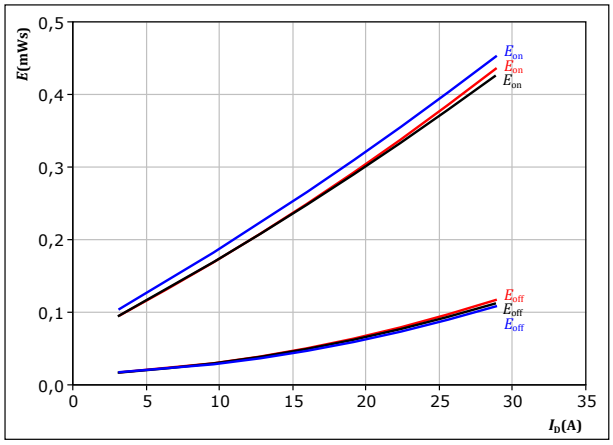


Inverter Switching Characteristics - Lo Side

figure 16. MOSFET

Typical switching energy losses as a function of drain current

$E = f(I_D)$



With an inductive load at

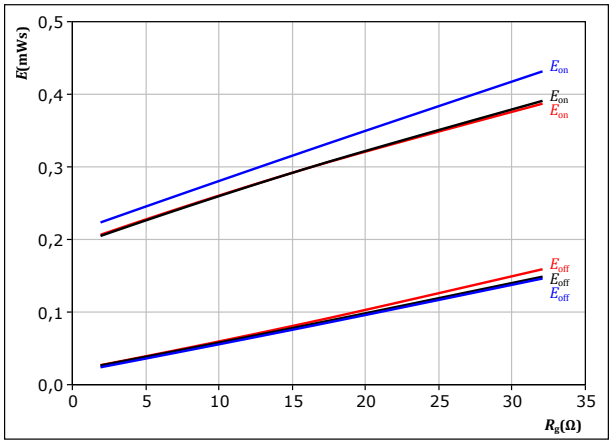
V_{DS} =	600	V
V_{GS} =	0/18	V
R_{gon} =	8	Ω
R_{goff} =	8	Ω

T_j: 25 °C, 125 °C, 150 °C

figure 17. MOSFET

Typical switching energy losses as a function of MOSFET turn on gate resistor

$E = f(R_g)$



With an inductive load at

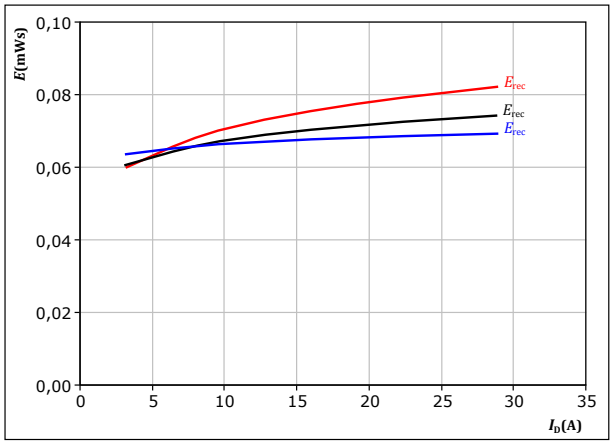
V_{DS} =	600	V
V_{GS} =	0/18	V
I_D =	16	A

T_j: 25 °C, 125 °C, 150 °C

figure 18. MOSFET

Typical reverse recovered energy loss as a function of drain current

$E_{rec} = f(I_D)$



With an inductive load at

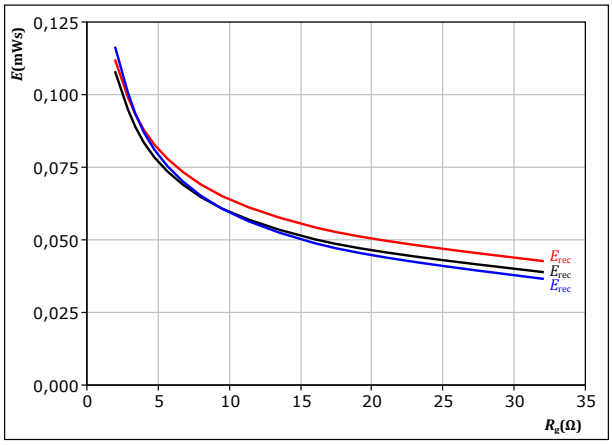
V_{DS} =	600	V
V_{GS} =	0/18	V
R_{gon} =	8	Ω

T_j: 25 °C, 125 °C, 150 °C

figure 19. MOSFET

Typical reverse recovered energy loss as a function of MOSFET turn on gate resistor

$E_{rec} = f(R_g)$



With an inductive load at

V_{DS} =	600	V
V_{GS} =	0/18	V
I_D =	16	A

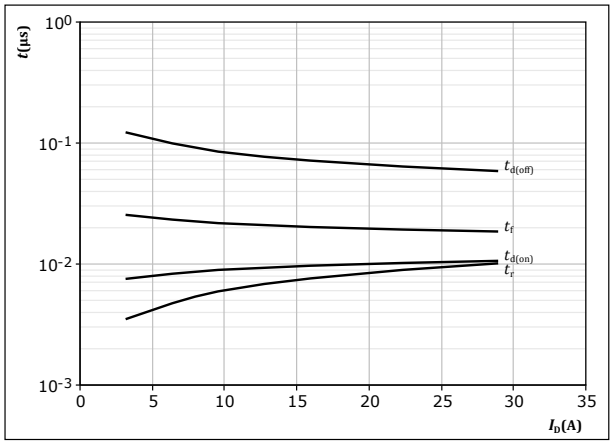
T_j: 25 °C, 125 °C, 150 °C

Inverter Switching Characteristics - Lo Side

figure 20. **MOSFET**

Typical switching times as a function of drain current

$t = f(I_D)$



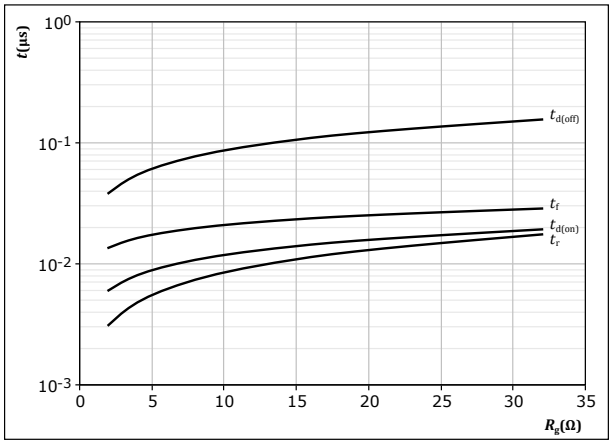
With an inductive load at

T_j =	150	°C
V_{DS} =	600	V
V_{GS} =	0/18	V
R_{gon} =	8	Ω
R_{goff} =	8	Ω

figure 21. **MOSFET**

Typical switching times as a function of MOSFET turn on gate resistor

$t = f(R_g)$



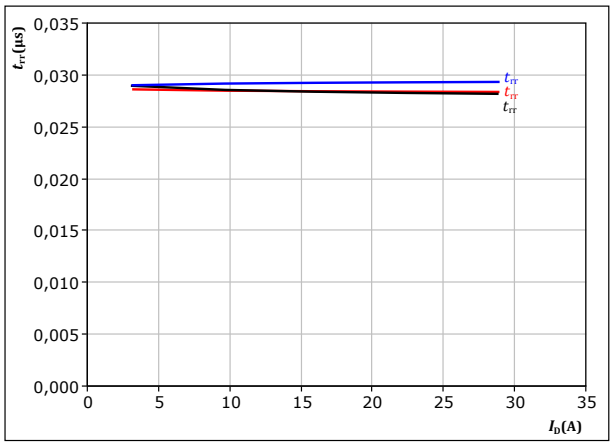
With an inductive load at

T_j =	150	°C
V_{DS} =	600	V
V_{GS} =	0/18	V
I_D =	16	A

figure 22. **MOSFET**

Typical reverse recovery time as a function of drain current

$t_{rr} = f(I_D)$



At

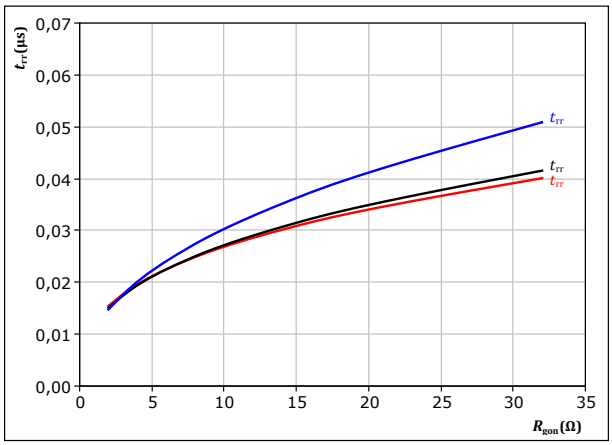
V_{DS} =	600	V
V_{GS} =	0/18	V
R_{gon} =	8	Ω

T_j: 25 °C, 125 °C, 150 °C

figure 23. **MOSFET**

Typical reverse recovery time as a function of MOSFET turn on gate resistor

$t_{rr} = f(R_{gon})$



At

V_{DS} =	600	V
V_{GS} =	0/18	V
I_D =	16	A

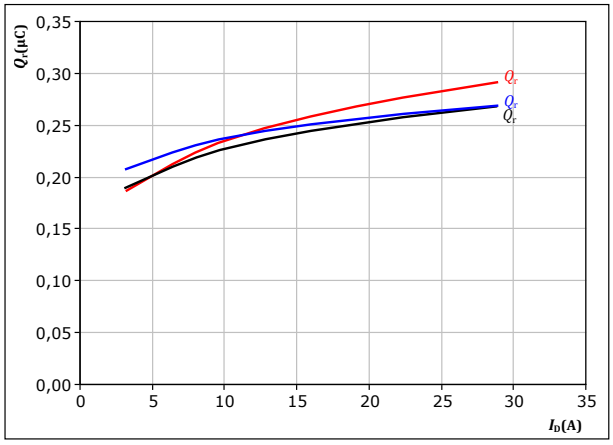
T_j: 25 °C, 125 °C, 150 °C

Inverter Switching Characteristics - Lo Side

figure 24. **MOSFET**

Typical recovered charge as a function of drain current

$Q_r = f(I_D)$

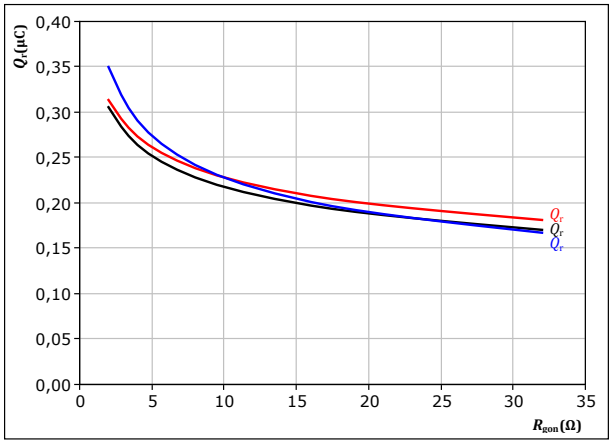


At					
	V_{DS} =	600	V		
	V_{GS} =	0/18	V	T_j:	25 °C
	R_{gon} =	8	Ω		125 °C
					150 °C

figure 25. **MOSFET**

Typical recovered charge as a function of MOSFET turn on gate resistor

$Q_r = f(R_{gon})$

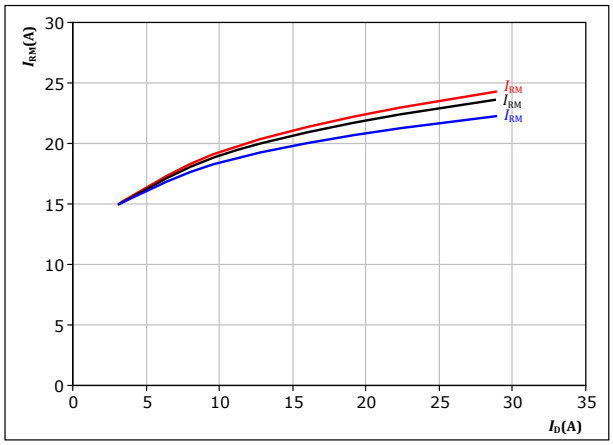


At					
	V_{DS} =	600	V		
	V_{GS} =	0/18	V	T_j:	25 °C
	I_D =	16	A		125 °C
					150 °C

figure 26. **MOSFET**

Typical peak reverse recovery current as a function of drain current

$I_{RM} = f(I_D)$

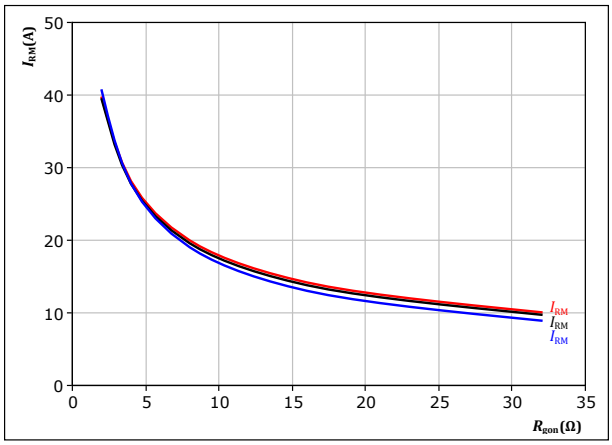


At					
	V_{DS} =	600	V		
	V_{GS} =	0/18	V	T_j:	25 °C
	R_{gon} =	8	Ω		125 °C
					150 °C

figure 27. **MOSFET**

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

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



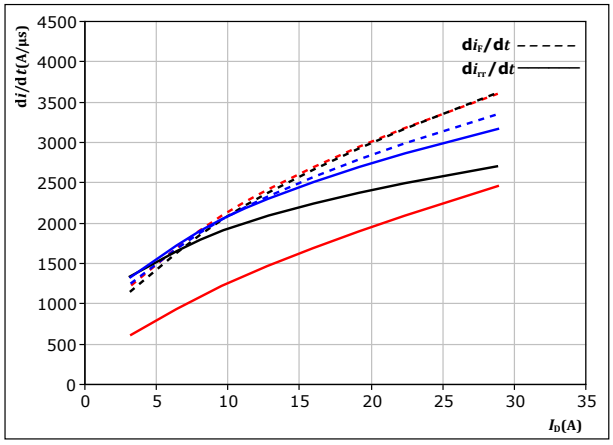
At					
	V_{DS} =	600	V		
	V_{GS} =	0/18	V	T_j:	25 °C
	I_D =	16	A		125 °C
					150 °C

Inverter Switching Characteristics - Lo Side

figure 28. **MOSFET**

Typical rate of fall of forward and reverse recovery current as a function of drain current

di_F/dt, di_{rr}/dt = f(I_D)

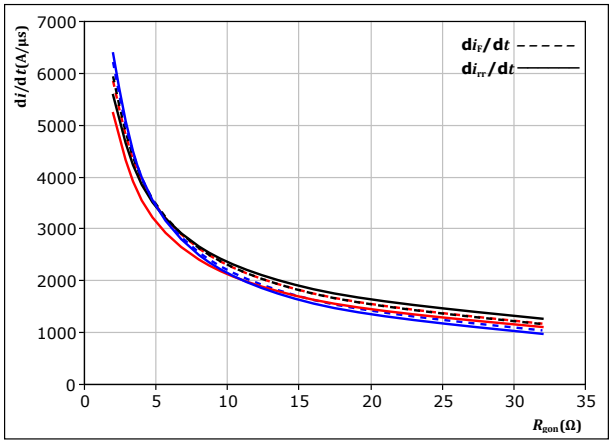


At				
V_{DS} =	600	V	T_j:	25 °C
V_{GS} =	0/18	V		125 °C
R_{gon} =	8	Ω		150 °C

figure 29. **MOSFET**

Typical rate of fall of forward and reverse recovery current as a function of turn on gate resistor

di_F/dt, di_{rr}/dt = f(R_{gon})

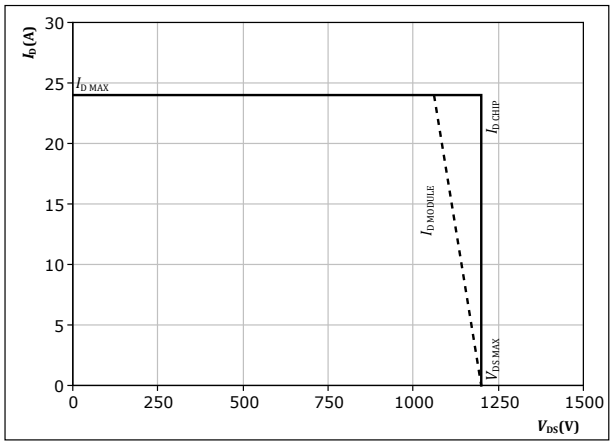


At				
V_{DS} =	600	V	T_j:	25 °C
V_{GS} =	0/18	V		125 °C
I_D =	16	A		150 °C

figure 30. **MOSFET**

Reverse bias safe operating area

I_D = f(V_{DS})



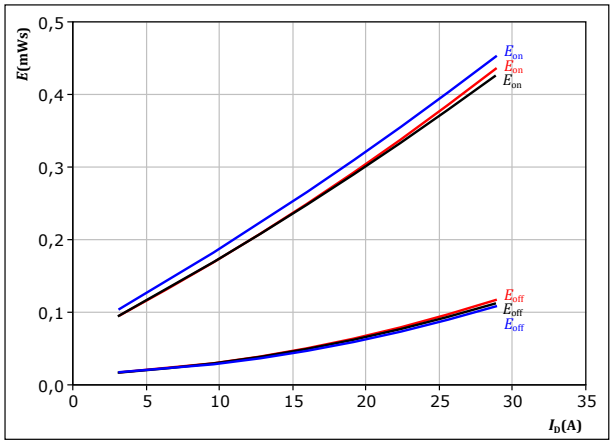
At			
T_j =	150	°C	
R_{gon} =	8	Ω	
R_{goff} =	8	Ω	

Inverter Switching Characteristics - Hi Side

figure 31. **MOSFET**

Typical switching energy losses as a function of drain current

$E = f(I_D)$



With an inductive load at

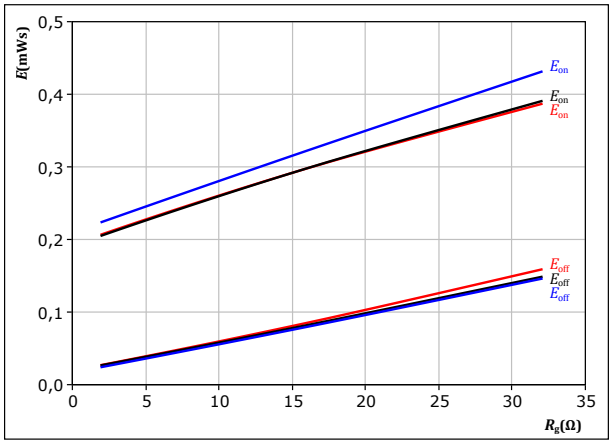
V_{DS} =	600	V
V_{GS} =	0/18	V
R_{gon} =	8	Ω
R_{goff} =	8	Ω

T_j: 25 °C, 125 °C, 150 °C

figure 32. **MOSFET**

Typical switching energy losses as a function of MOSFET turn on gate resistor

$E = f(R_g)$



With an inductive load at

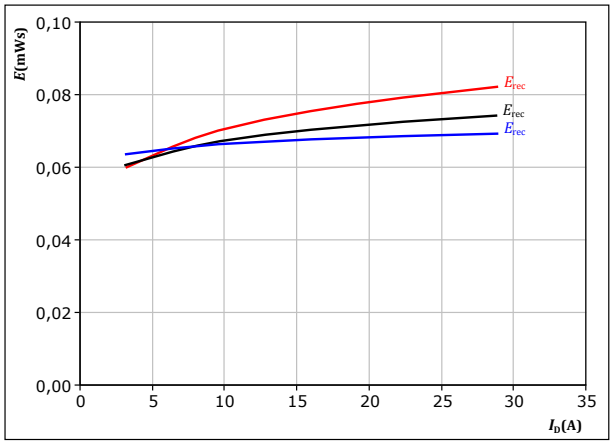
V_{DS} =	600	V
V_{GS} =	0/18	V
I_D =	16	A

T_j: 25 °C, 125 °C, 150 °C

figure 33. **MOSFET**

Typical reverse recovered energy loss as a function of drain current

$E_{rec} = f(I_D)$



With an inductive load at

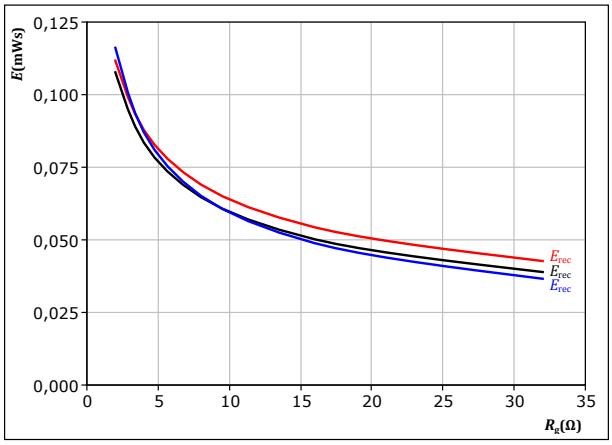
V_{DS} =	600	V
V_{GS} =	0/18	V
R_{gon} =	8	Ω

T_j: 25 °C, 125 °C, 150 °C

figure 34. **MOSFET**

Typical reverse recovered energy loss as a function of MOSFET turn on gate resistor

$E_{rec} = f(R_g)$



With an inductive load at

V_{DS} =	600	V
V_{GS} =	0/18	V
I_D =	16	A

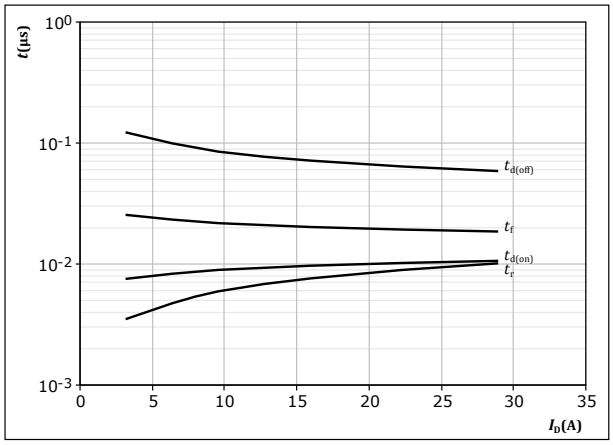
T_j: 25 °C, 125 °C, 150 °C

Inverter Switching Characteristics - Hi Side

figure 35. **MOSFET**

Typical switching times as a function of drain current

$t = f(I_D)$



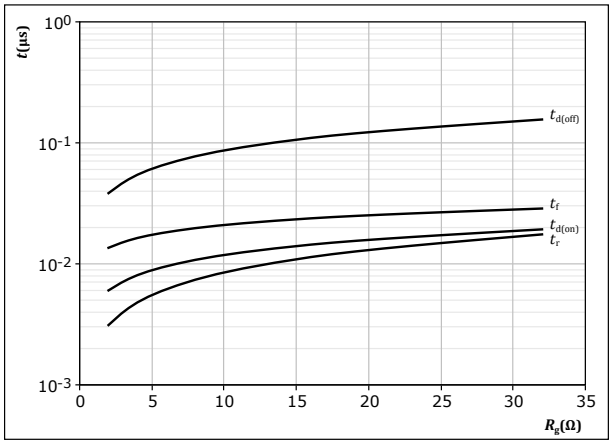
With an inductive load at

T_j =	150	°C
V_{DS} =	600	V
V_{GS} =	0/18	V
R_{gon} =	8	Ω
R_{goff} =	8	Ω

figure 36. **MOSFET**

Typical switching times as a function of MOSFET turn on gate resistor

$t = f(R_g)$



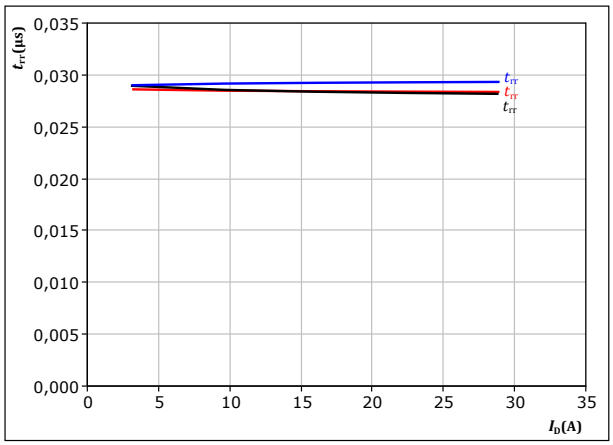
With an inductive load at

T_j =	150	°C
V_{DS} =	600	V
V_{GS} =	0/18	V
I_D =	16	A

figure 37. **MOSFET**

Typical reverse recovery time as a function of drain current

$t_{rr} = f(I_D)$

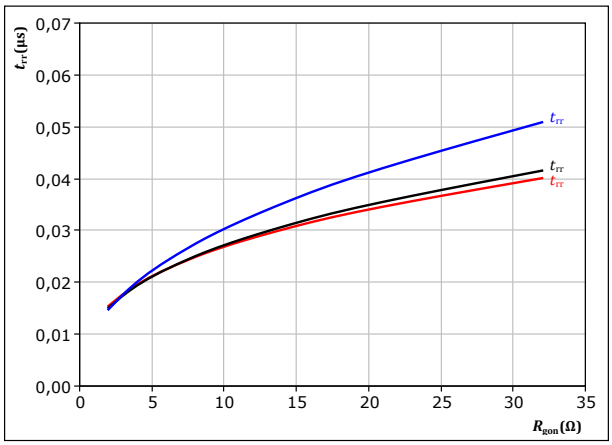


At	V_{DS} =	600	V	
	V_{GS} =	0/18	V	
	R_{gon} =	8	Ω	
	T_j:			25 °C
				125 °C
				150 °C

figure 38. **MOSFET**

Typical reverse recovery time as a function of MOSFET turn on gate resistor

$t_{rr} = f(R_{gon})$



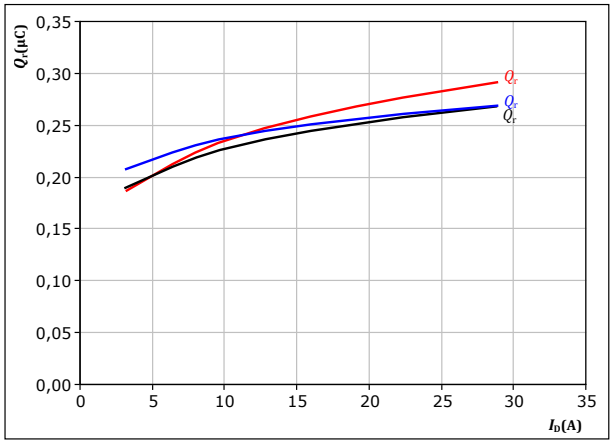
At	V_{DS} =	600	V	
	V_{GS} =	0/18	V	
	I_D =	16	A	
	T_j:			25 °C
				125 °C
				150 °C

Inverter Switching Characteristics - Hi Side

figure 39. **MOSFET**

Typical recovered charge as a function of drain current

$Q_r = f(I_D)$

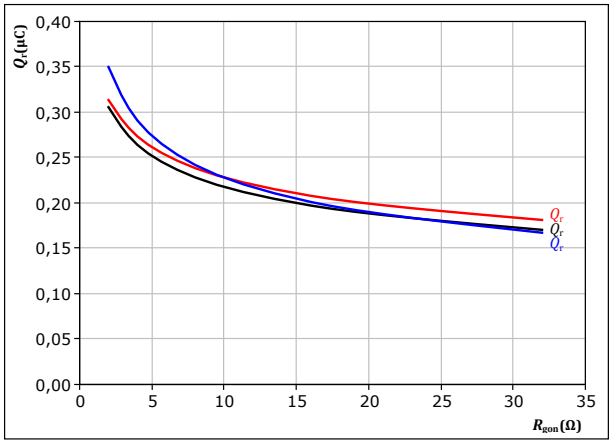


At					
	V_{DS} =	600	V		
	V_{GS} =	0/18	V	T_j:	25 °C, 125 °C, 150 °C
	R_{gon} =	8	Ω		

figure 40. **MOSFET**

Typical recovered charge as a function of MOSFET turn on gate resistor

$Q_r = f(R_{gon})$

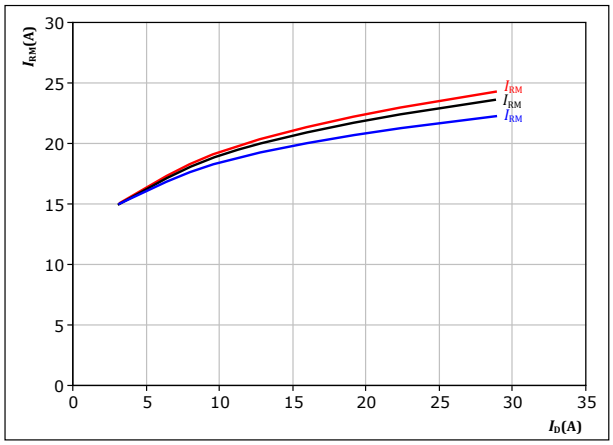


At					
	V_{DS} =	600	V		
	V_{GS} =	0/18	V	T_j:	25 °C, 125 °C, 150 °C
	I_D =	16	A		

figure 41. **MOSFET**

Typical peak reverse recovery current as a function of drain current

$I_{RM} = f(I_D)$

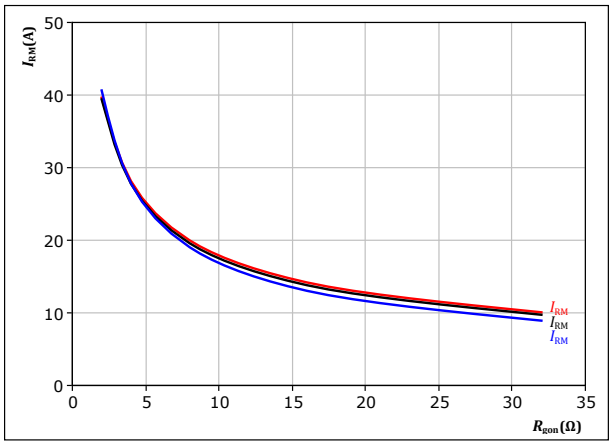


At					
	V_{DS} =	600	V		
	V_{GS} =	0/18	V	T_j:	25 °C, 125 °C, 150 °C
	R_{gon} =	8	Ω		

figure 42. **MOSFET**

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

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



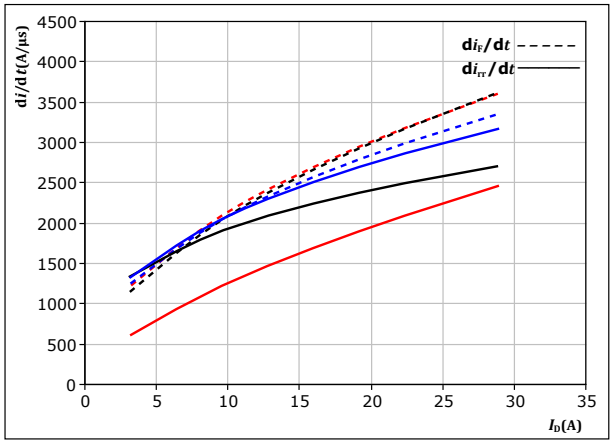
At					
	V_{DS} =	600	V		
	V_{GS} =	0/18	V	T_j:	25 °C, 125 °C, 150 °C
	I_D =	16	A		

Inverter Switching Characteristics - Hi Side

figure 43. **MOSFET**

Typical rate of fall of forward and reverse recovery current as a function of drain current

di_F/dt, di_{rr}/dt = f(I_D)

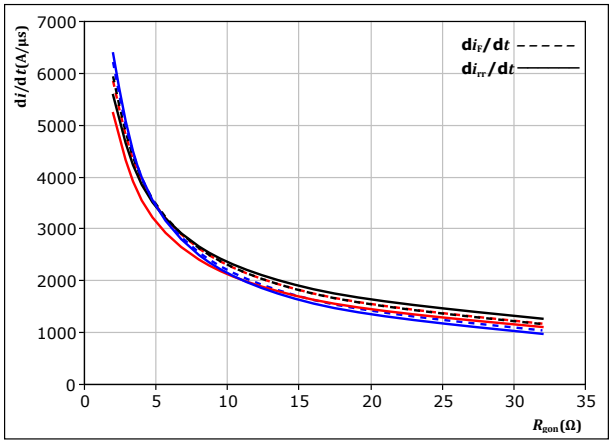


At	V_{DS} =	600	V		
	V_{GS} =	0/18	V	T_j:	25 °C
	R_{gon} =	8	Ω		125 °C
					150 °C

figure 44. **MOSFET**

Typical rate of fall of forward and reverse recovery current as a function of turn on gate resistor

di_F/dt, di_{rr}/dt = f(R_{gon})

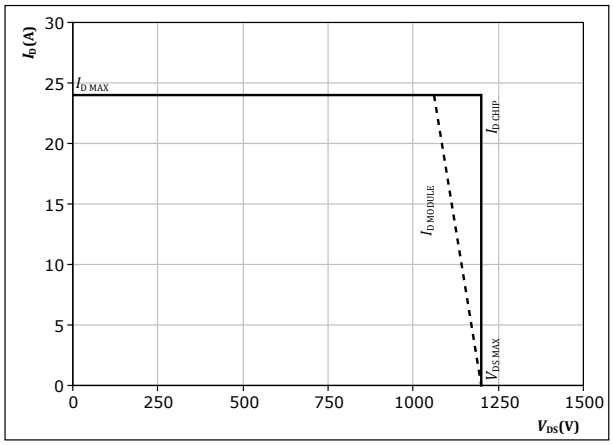


At	V_{DS} =	600	V		
	V_{GS} =	0/18	V	T_j:	25 °C
	I_D =	16	A		125 °C
					150 °C

figure 45. **MOSFET**

Reverse bias safe operating area

I_D = f(V_{DS})



At	T_j =	150	°C
	R_{gon} =	8	Ω
	R_{goff} =	8	Ω

Switching Definitions

figure 46. MOSFET

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

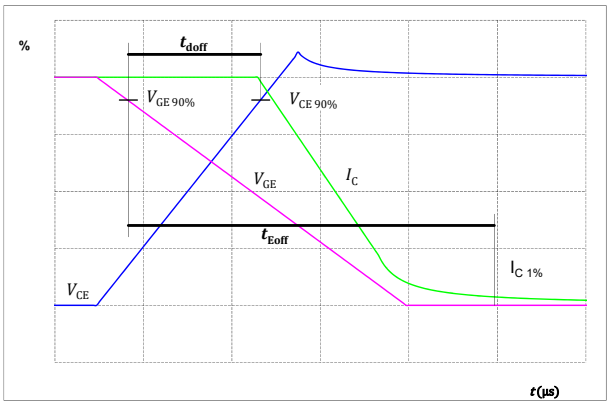


figure 47. MOSFET

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

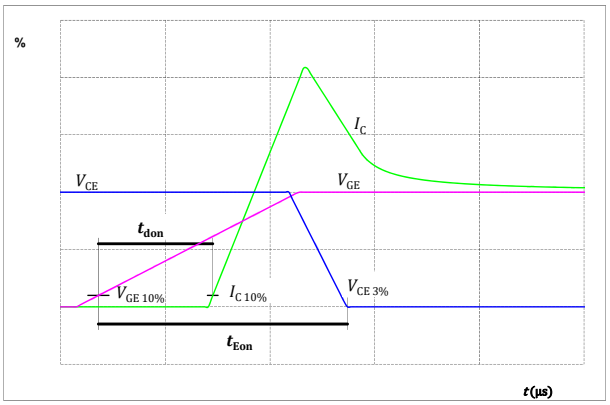


figure 48. MOSFET

Turn-off Switching Waveforms & definition of t_f

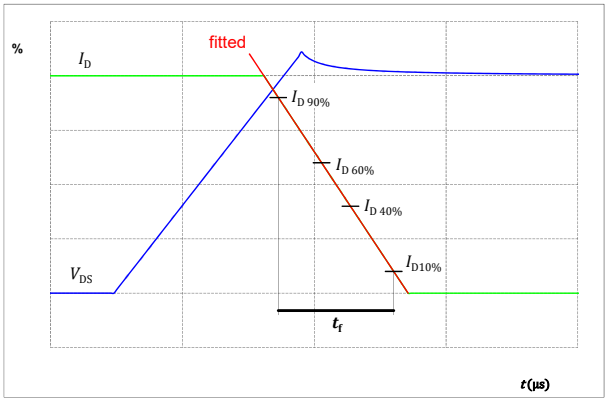
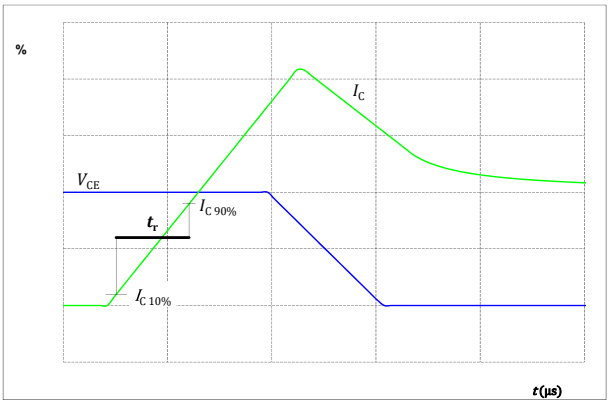


figure 49. MOSFET

Turn-on Switching Waveforms & definition of t_r



Switching Definitions

figure 50. **FWD**

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

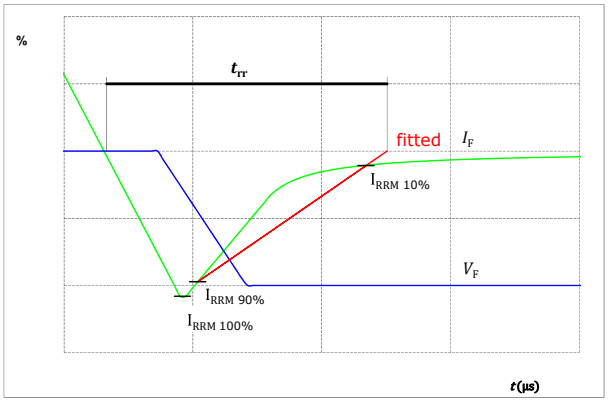


figure 51. **FWD**

Turn-on Switching Waveforms & definition of t_{Qrr} (t_{Qrr} = integrating time for Q_{rr})

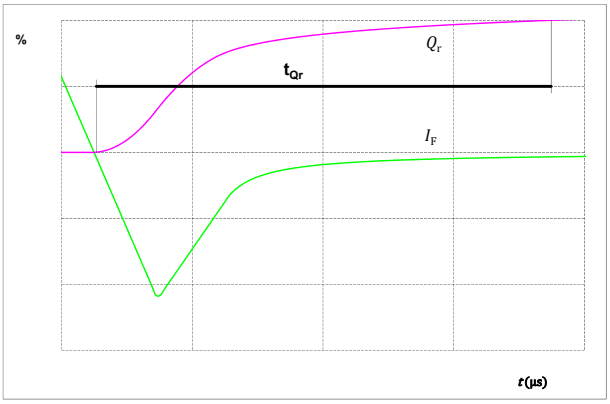
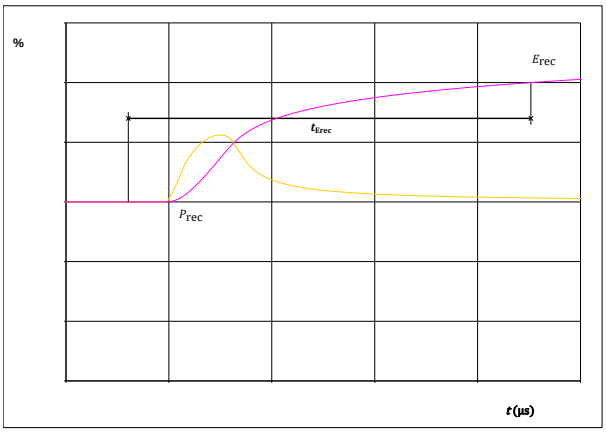


figure 52. **FWD**

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



Ordering Code

Version	Ordering Code
Without thermal paste	10-PZ124PA062MR-L628F18Y
With thermal paste (5,2 W/mK, PTM6000HV)	10-PZ124PA062MR-L628F18Y-/7/
With thermal paste (3,4 W/mK, PSX-P7)	10-PZ124PA062MR-L628F18Y-/3/

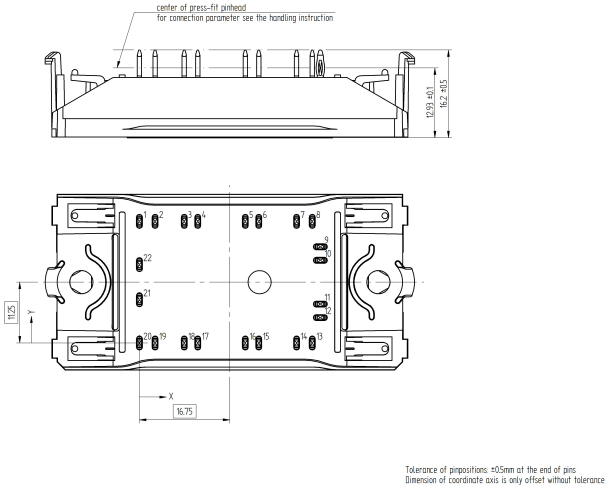
Marking

	Name		Date code	UL & VIN	Lot	Serial
Text	NN-NNNNNNNNNNNNN-TTTTTTVV		WWYY	UL VIN	LLLLL	SSSS
Datamatrix	**Type&Ver**	**Lot number**	**Serial**	**Date code**		
	TTTTTTTVV	LLLLL	SSSS	WWYY		

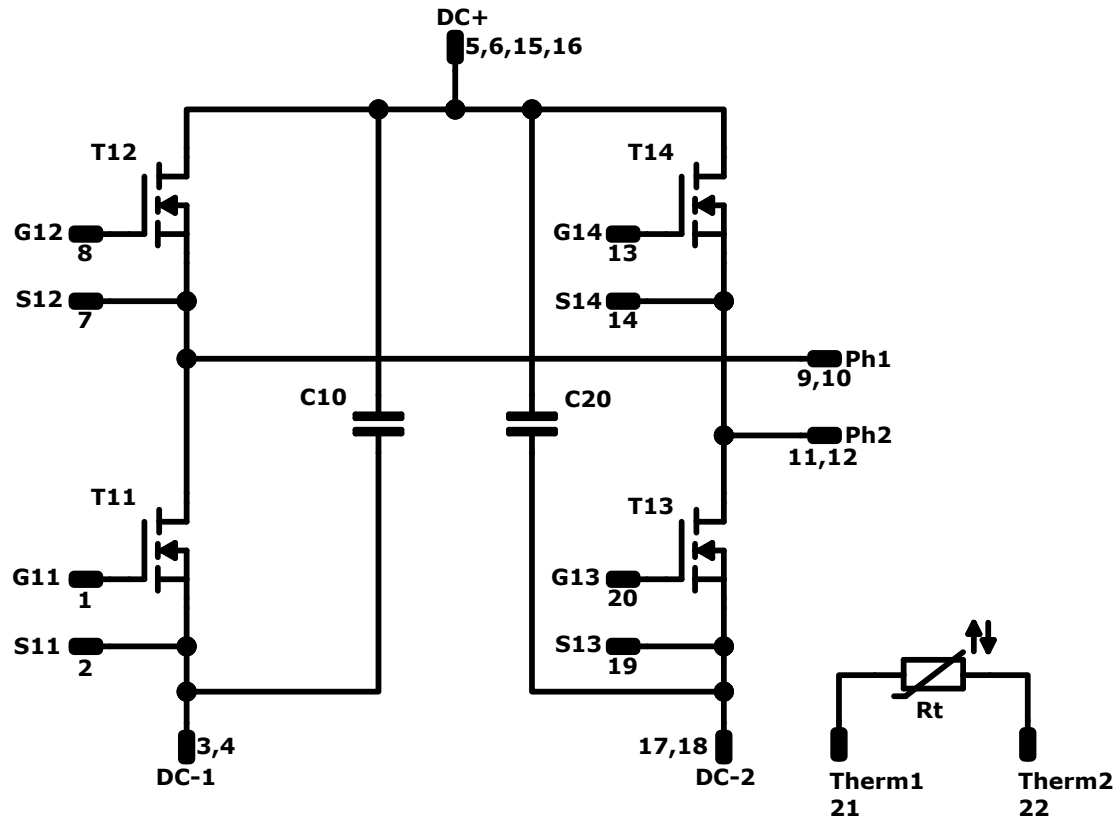
Outline

Pin table [mm]

Pin	X	Y	Function
1	0	22,5	G11
2	2,9	22,5	S11
3	8,3	22,5	DC-1
4	10,8	22,5	DC-1
5	19,6	22,5	DC+
6	22,1	22,5	DC+
7	29,1	22,5	S12
8	32	22,5	G12
9	33,5	17,8	Ph1
10	33,5	15,3	Ph1
11	33,5	7,2	Ph2
12	33,5	4,7	Ph2
13	32	0	G14
14	29,1	0	S14
15	22,1	0	DC+
16	19,6	0	DC+
17	10,8	0	DC-2
18	8,3	0	DC-2
19	2,9	0	S13
20	0	0	G13
21	0	8	Therm1
22	0	14,5	Therm2



Pinout



Identification

ID	Component	Voltage	Current	Function	Comment
T11, T13	MOSFET	1200 V	62 mΩ	Inverter Switch - Lo Side	
T12, T14	MOSFET	1200 V	62 mΩ	Inverter Switch - Hi Side	
C10, C20	Capacitor	1000 V		Capacitor	
Rt	Thermistor			Thermistor	

Packaging instruction				
Standard packaging quantity (SPQ) 135	>SPQ	Standard	<SPQ	Sample

Handling instruction
Handling instructions for *flow* 0 packages see vincotech.com website.

Package data
Package data for *flow* 0 packages see vincotech.com website.

Vincotech thermistor reference
See Vincotech thermistor reference table at 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-PZ124PA062MR-L628F18Y-D1-14	31 May. 2023		