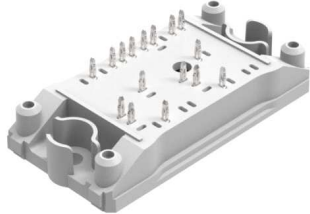
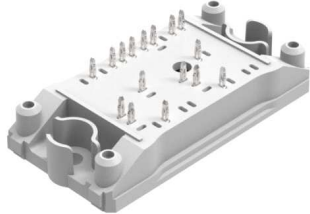
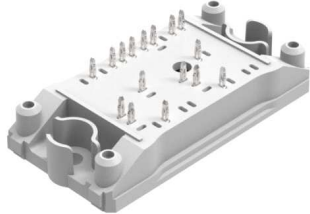
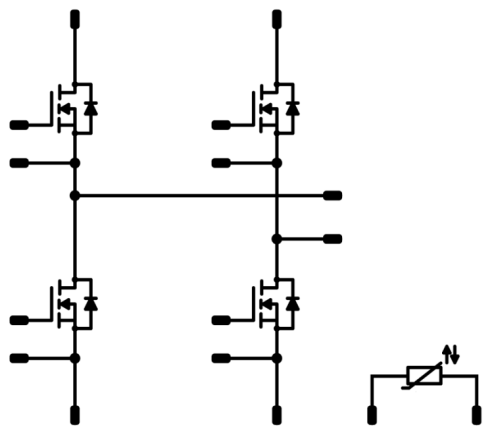
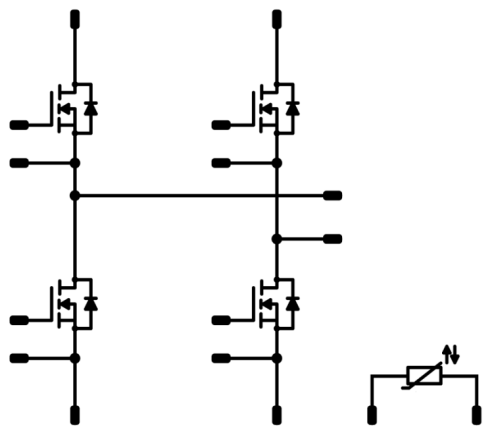
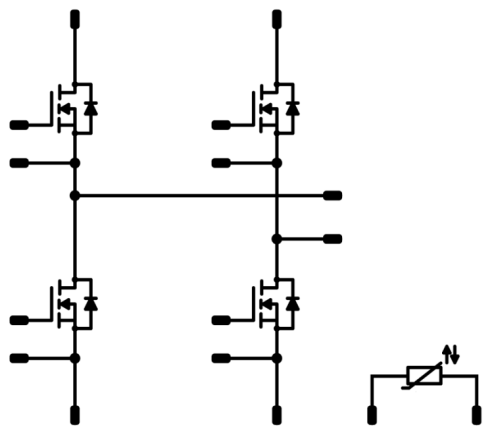




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fastPACK 0 SiC		900 V / 65 mΩ			
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Types					
<ul style="list-style-type: none"> 10-PC094PB065ME01-L637F06Y 					

Maximum Ratings

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

Parameter	Symbol	Condition	Value	Unit
H-Bridge Switch				
Drain-source voltage	V_{DSS}		900	V
Drain current	I_D	$T_j = T_{jmax}$ $T_s = 80\text{ °C}$	33	A
Peak drain current	I_{DM}	t_p limited by T_{jmax}	90	A
Total power dissipation	P_{tot}	$T_j = T_{jmax}$ $T_s = 80\text{ °C}$	34	W
Gate-source voltage	V_{GSS}		-8/18	V
Maximum Junction Temperature	T_{jmax}		150	°C



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Parameter	Symbol	Condition	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 Voltage $t_p=2s$	4000	V
Creepage distance			min. 12,5	mm
Clearance			9,61	mm
Comparative Tracking Index	CTI		> 200	



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Characteristic Values

Parameter	Symbol	Conditions				Value			Unit
		V_{GE} [V]	V_{CE} [V]	I_c [A]	T_j [°C]	Min	Typ	Max	

H-Bridge Switch

Static

Drain-source on-state resistance	$r_{DS(on)}$		10		36	25 125		65	78	mΩ
Gate-source threshold voltage	$V_{GS(th)}$	$V_{GS} = V_{DS}$			0,005	25 125	1,8			V
Gate to Source Leakage Current	I_{GSS}		-8/18	0		25 125			250	nA
Zero Gate Voltage Drain Current	I_{DSS}		0	900		25 125			100	μA
Internal gate resistance	r_g							4,7		Ω
Gate charge	Q_g							30,4		nC
Gate to source charge	Q_{GS}		-4/15	400	20	25		7,5		
Gate to drain charge	Q_{GD}							12		
Short-circuit input capacitance	C_{iss}							660		pF
Short-circuit output capacitance	C_{oss}	f=1MHz	0	600		25		60		
Reverse transfer capacitance	C_{rss}							4		

Reverse Diode Static

Diode forward voltage	V_{SD}				10	25		4,8		V
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Thermal

Thermal resistance junction to sink	$R_{th(j-s)}$	phase-change material $\lambda=3,4$ W/mK						2,06		K/W
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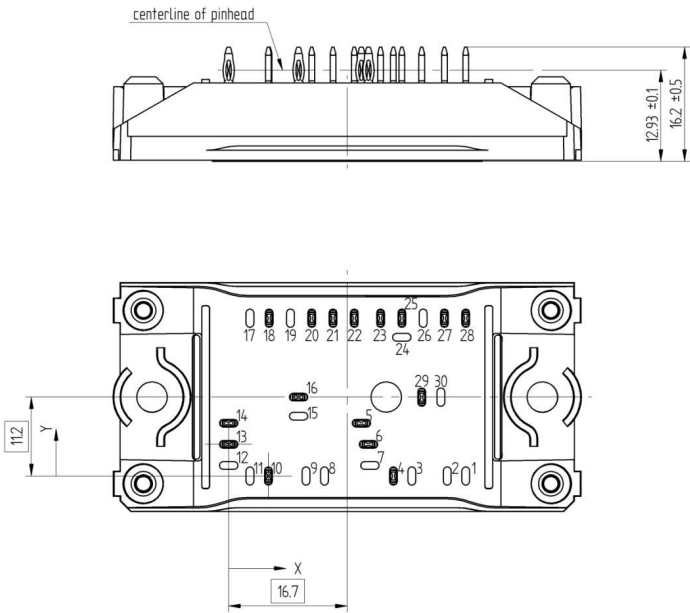
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Parameter	Symbol	Conditions					Value			Unit
		V_{GE} [V]	V_{CE} [V]	I_C [A]	T_j [°C]	Min	Typ	Max		
Thermistor										
Rated resistance	R				25		22			kΩ
Deviation of R100	$\Delta_{R/R}$	R100=1484 Ω			100	-1		1		%
Power dissipation	P				25		5			mW
Power dissipation constant					25		1,5			mW/K
B-value	$B_{(25/50)}$	Tol. ±1%			25		3962			K
B-value	$B_{(25/100)}$	Tol. ±1%			25		4000			K
Vincotech NTC Reference									I	



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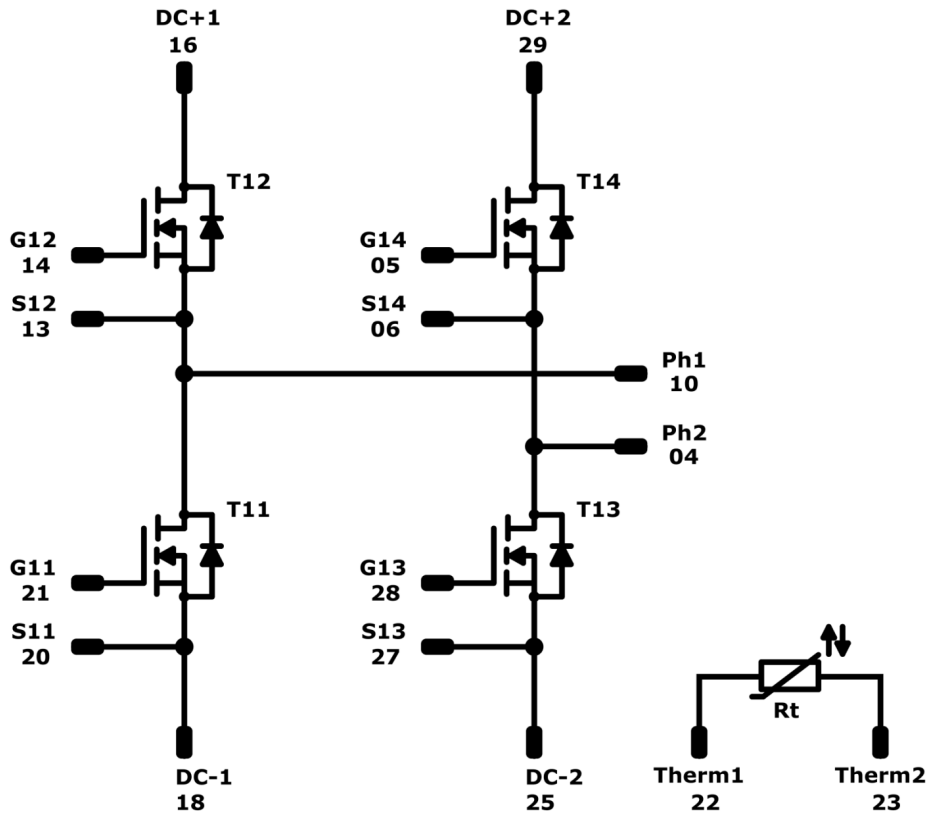
Ordering Code & Marking						
Version			Ordering Code			
with thermal paste with Press-fit pins 12mm housing			10-PC094PB065ME01-L637F06Y-/3/			
NN-NNNNNNNNNNNNNN TTTTIVV WWYY UL Vinco LLLLL SSSS						
Text	Name		Date code	UL & Vinco	Lot	Serial
	NN-NNNNNNNNNNNNNN-TTTTIVV		WWYY	UL Vinco	LLLLL	SSSS
Datamatrix	Type&Ver	Lot number	Serial	Date code		
	TTTTTIVV	LLLLL	SSSS	WWYY		

Pin table [mm]				Outline	
Pin	X	Y	Function		
1			not assembled		
2			not assembled		
3			not assembled		
4	23,2	0	Ph2		
5	18,7	7,5	G14		
6	19,7	4,5	S14		
7			not assembled		
8			not assembled		
9			not assembled		
10	5,6	0	Ph1		
11			not assembled		
12			not assembled		
13	0	4,5	S12		
14	0	7,5	G12		
15			not assembled		
16	9,85	11,2	DC+1		
17			not assembled		
18	5,7	22,4	DC-1		
19			not assembled		
20	11,7	22,4	S11		
21	14,7	22,4	G11		
22	17,7	22,4	Therm1		
23	21,4	22,4	Therm2		
24			not assembled		
25	24,4	22,4	DC-2		
26			not assembled		
27	30,4	22,4	S13		
28	33,4	22,4	G13		
29	27,2	11,2	DC+2		
30			not assembled		



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Pinout



Identification

ID	Component	Voltage	Current	Function	Comment
T11-T14	MOSFET	900 V	65 mΩ	H-Bridge Switch	
Rt	NTC	-	-	Thermistor	



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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.

Document No.:	Date:	Modification:	Pages
10-PC094PB065ME01-L637F06Y-T1-14	08 Dec. 2015		

Product status definition		
Datasheet Status	Product Status	Definition
Target	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice. The data contained is exclusively intended for technically trained staff.

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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.