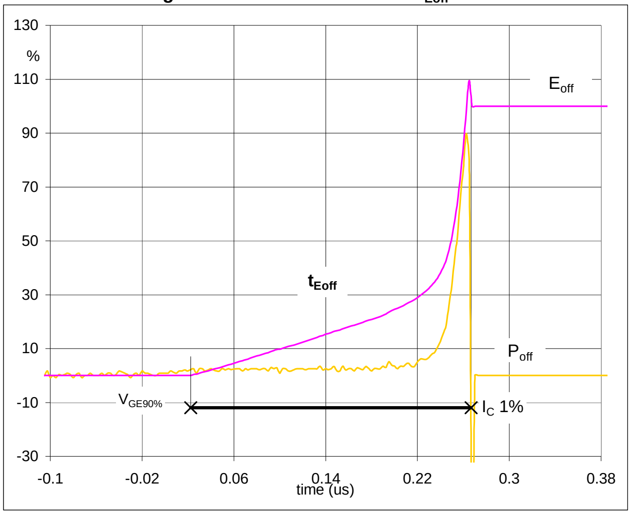
Switching Definitions BUCK MOSFET

Figure 5 Output inverter IGBT

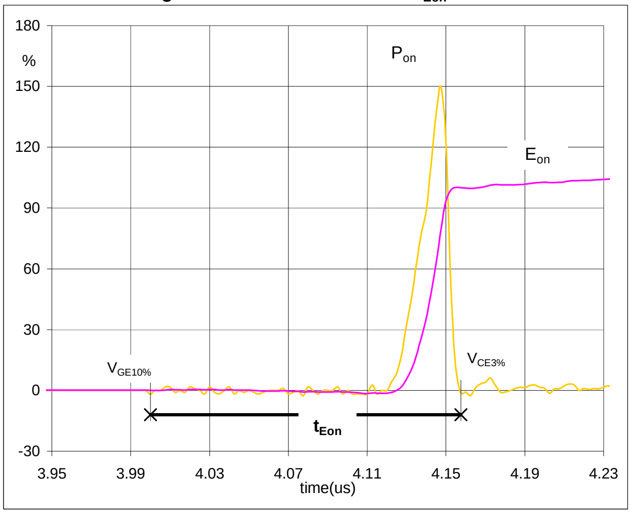
Turn-off Switching Waveforms & definition of t_{Eoff}



P_{off} (100%) =	13.94	kW
E_{off} (100%) =	0.20	mJ
t_{Eoff} =	0.24	μs

Figure 6 Output inverter IGBT

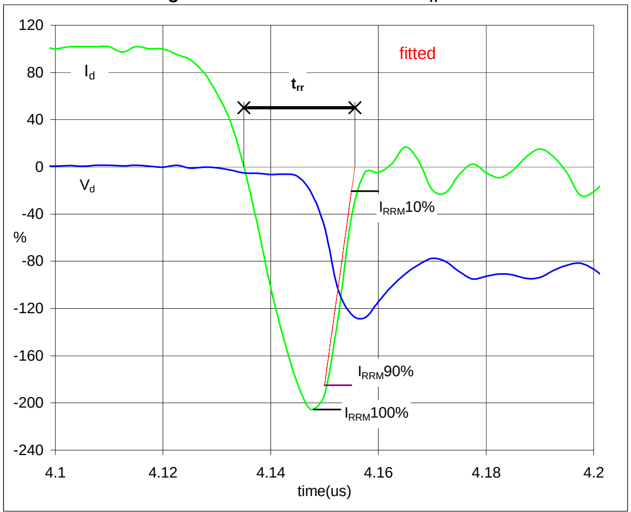
Turn-on Switching Waveforms & definition of t_{Eon}



P_{on} (100%) =	13.94	kW
E_{on} (100%) =	0.33	mJ
t_{Eon} =	0.16	μs

Figure 7 Output inverter IGBT

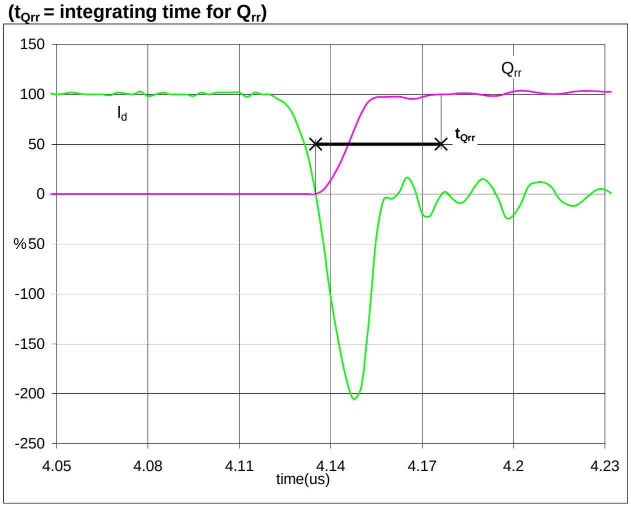
Turn-off Switching Waveforms & definition of t_{rr}



V_d (100%) =	350	V
I_d (100%) =	40	A
I_{RRM} (100%) =	-82	A
t_{rr} =	0.02	μs

Figure 8 Output inverter FRED

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

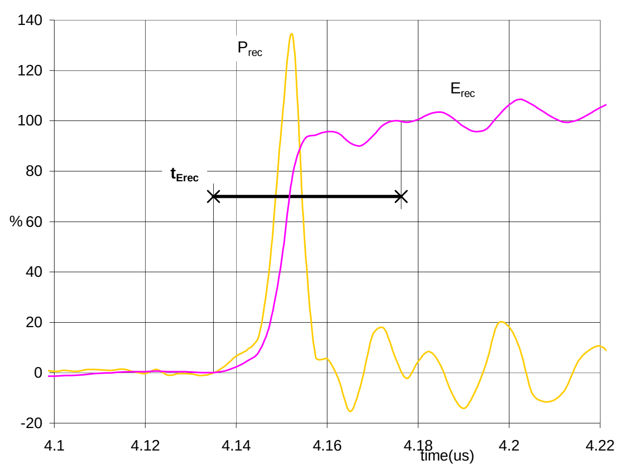


I_d (100%) =	40	A
Q_{rr} (100%) =	1.09	μC
t_{Qrr} =	0.04	μs

Switching Definitions BUCK MOSFET

Figure 9	Output inverter FRED

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

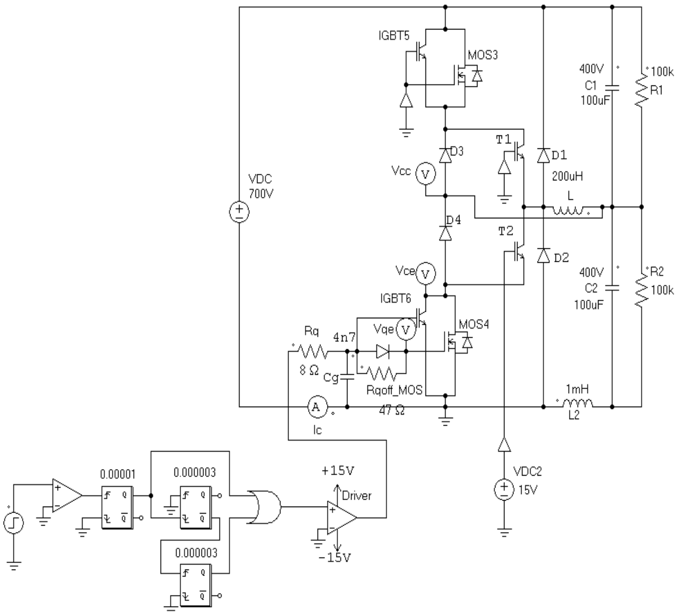


P_{rec} (100%) =	13.94	kW
E_{rec} (100%) =	0.16	mJ
t_{Erec} =	0.04	μs

Measurement circuits

Figure 11

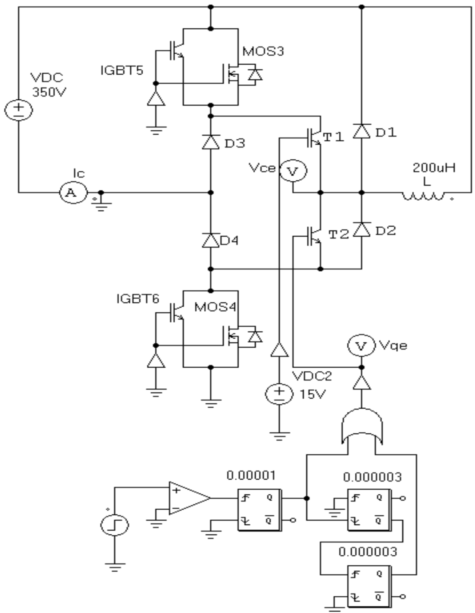
BUCK stage switching measurement circuit



Cg is included in the module

Figure 12

BOOST stage switching measurement circuit



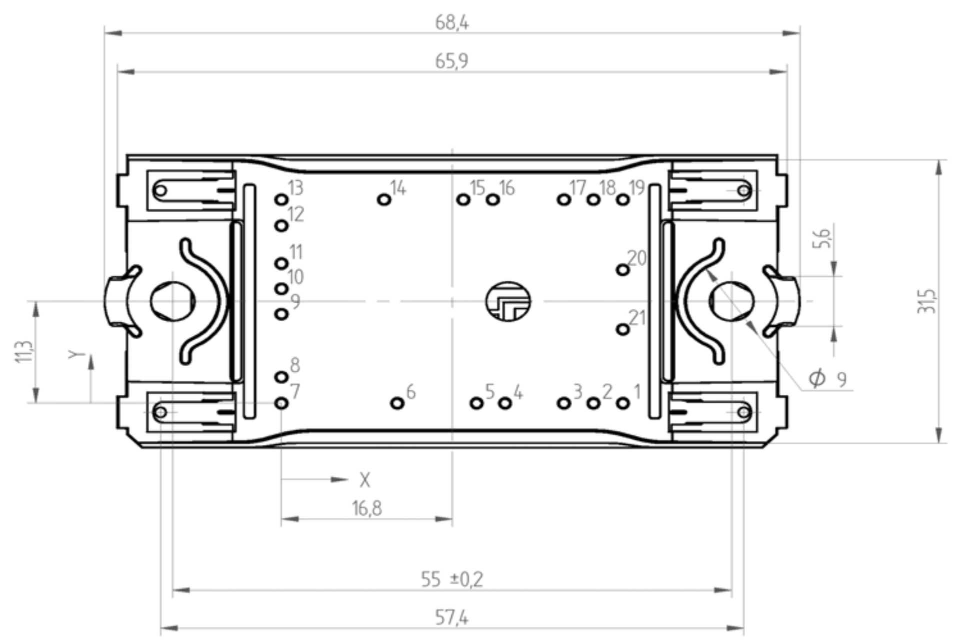
Ordering Code and Marking - Outline - Pinout

Ordering Code & Marking

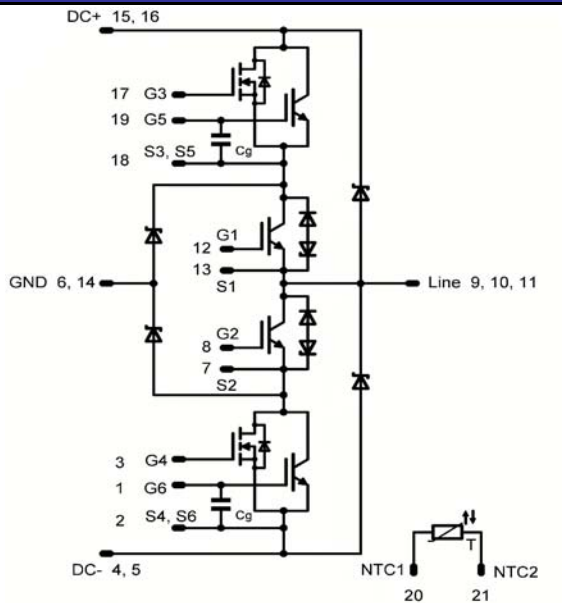
Version	Ordering Code	in DataMatrix as	in packaging barcode as
without thermal paste 12mm housing	10-FZ06NPA070FP01-P969F10	P969F10	P969F10

Outline

Pin table		
Pin	X	Y
1	33,6	0
2	30,7	0
3	27,8	0
4	22	0
5	19,2	0
6	11,4	0
7	0	0
8	0	2,9
9	0	9,9
10	0	12,7
11	0	15,5
12	0	19,7
13	0	22,6
14	10,1	22,6
15	17,9	22,6
16	20,8	22,6
17	27,8	22,6
18	30,7	22,6
19	33,6	22,6
20	33,6	14,8
21	33,6	8,2



Pinout



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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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