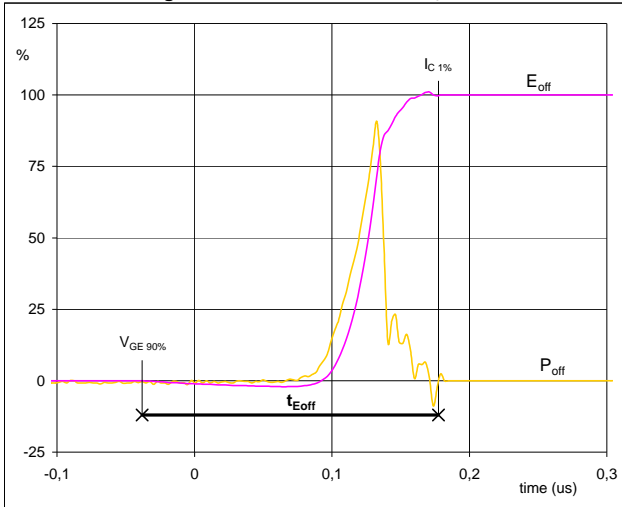


Switching Definitions INPUT BOOST

Figure 5 Input Boost IGBT

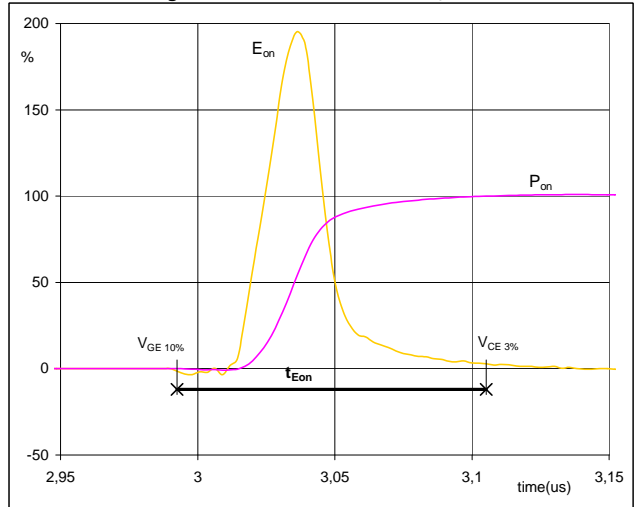
Turn-off Switching Waveforms & definition of t_{Eoff}



$P_{off} (100\%) = 12,00 \text{ kW}$
 $E_{off} (100\%) = 0,29 \text{ mJ}$
 $t_{Eoff} = 0,22 \text{ }\mu\text{s}$

Figure 6 Input Boost IGBT

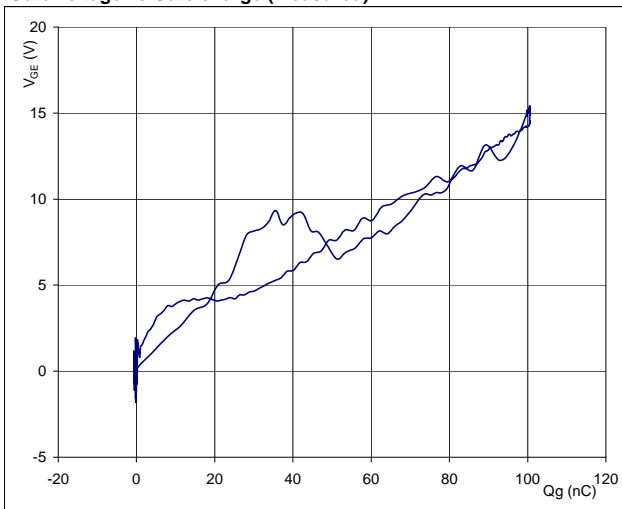
Turn-on Switching Waveforms & definition of t_{Eon}



$P_{on} (100\%) = 12,00 \text{ kW}$
 $E_{on} (100\%) = 0,60 \text{ mJ}$
 $t_{Eon} = 0,11 \text{ }\mu\text{s}$

Figure 7 Input Boost IGBT

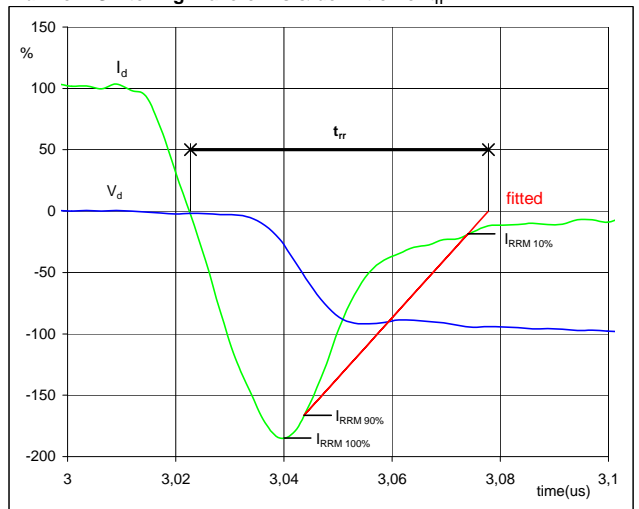
Gate voltage vs Gate charge (measured)



$V_{GEoff} = 0 \text{ V}$
 $V_{GEon} = 15 \text{ V}$
 $V_C (100\%) = 400 \text{ V}$
 $I_C (100\%) = 30 \text{ A}$
 $Q_g = 101 \text{ nC}$

Figure 8 Input Boost FWD

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

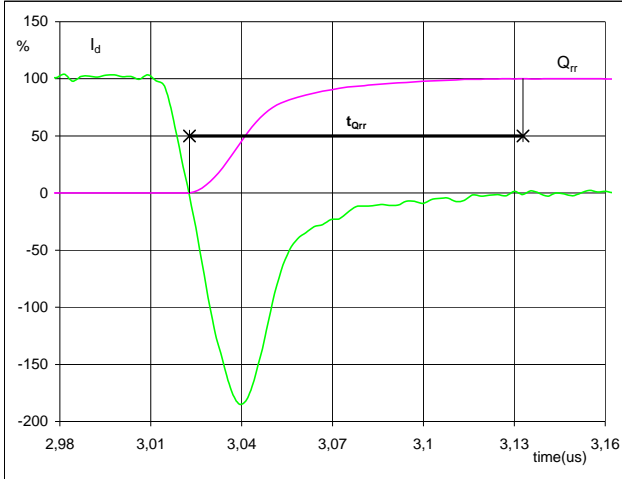


$V_d (100\%) = 400 \text{ V}$
 $I_d (100\%) = 30 \text{ A}$
 $I_{RRM} (100\%) = -56 \text{ A}$
 $t_{rr} = 0,056 \text{ }\mu\text{s}$

Switching Definitions INPUT BOOST

Figure 9 Input Boost FWD

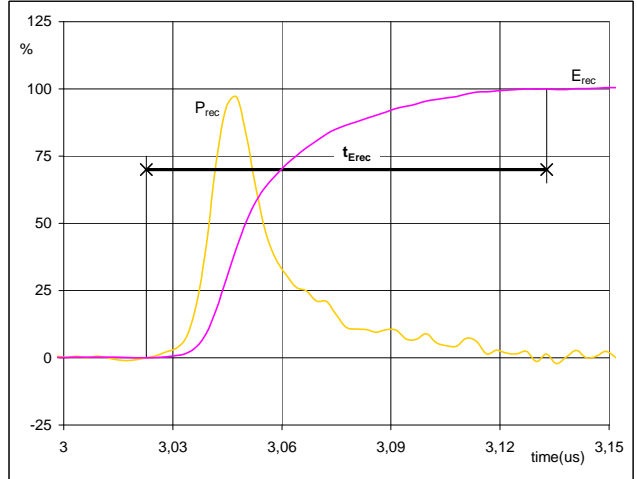
Turn-on Switching Waveforms & definition of t_{Qrr}
 (t_{Qrr} = integrating time for Q_{rr})



I_d (100%) =	30	A
Q_{rr} (100%) =	1,46	μC
t_{Qrr} =	0,11	μs

Figure 10 Input Boost FWD

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



P_{rec} (100%) =	12,00	kW
E_{rec} (100%) =	0,28	mJ
t_{Erec} =	0,11	μs

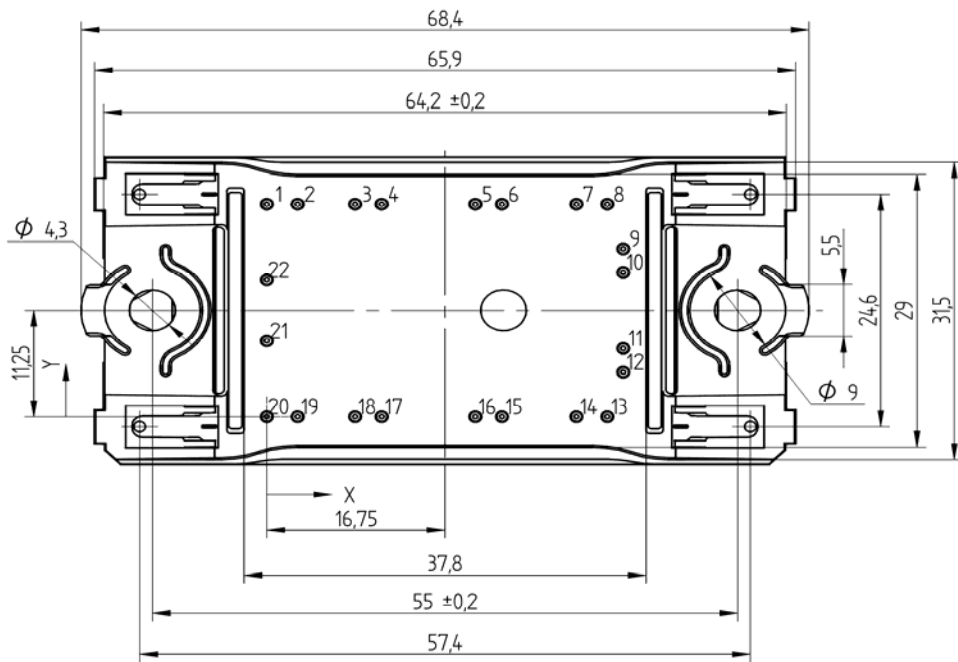
Ordering Code and Marking - Outline - Pinout

Ordering Code & Marking

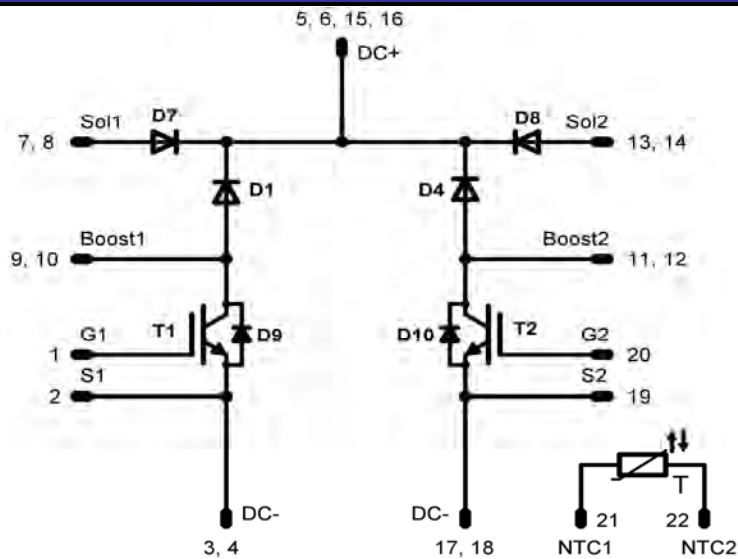
Version	Ordering Code	in DataMatrix as	in packaging barcode as
without thermal paste 12mm housing	V23990-P623-L82-PM	P623L82	P623L82
with thermal paste 12mm housing	V23990-P623-L82-/3-/PM	P623L82	P623L82

Outline

Pin table		
Pin	X	Y
1	0	225
2	2,9	225
3	8,3	225
4	10,8	225
5	19,6	225
6	22,1	225
7	29,1	225
8	32	225
9	33,5	17,8
10	33,5	15,3
11	33,5	7,2
12	33,5	4,7
13	32	0
14	29,1	0
15	22,1	0
16	19,6	0
17	10,8	0
18	8,3	0
19	2,9	0
20	0	0
21	0	8
22	0	14,5



Pinout



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