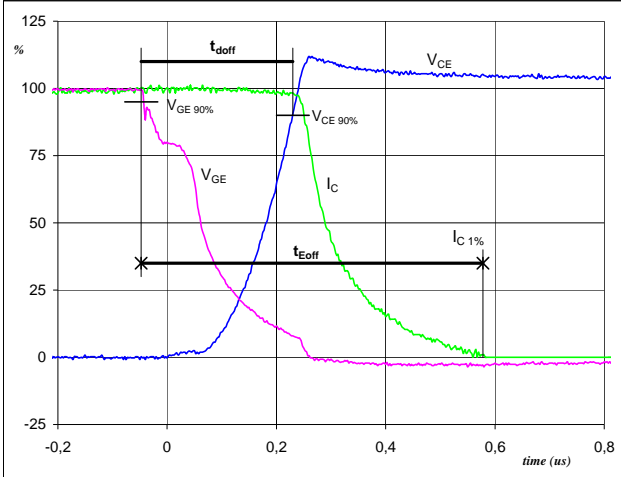


Switching Definitions Output Inverter

General conditions	
T_j	= 150 °C
R_{gon}	= 32 Ω
R_{goff}	= 32 Ω

Figure 1 Output inverter IGBT

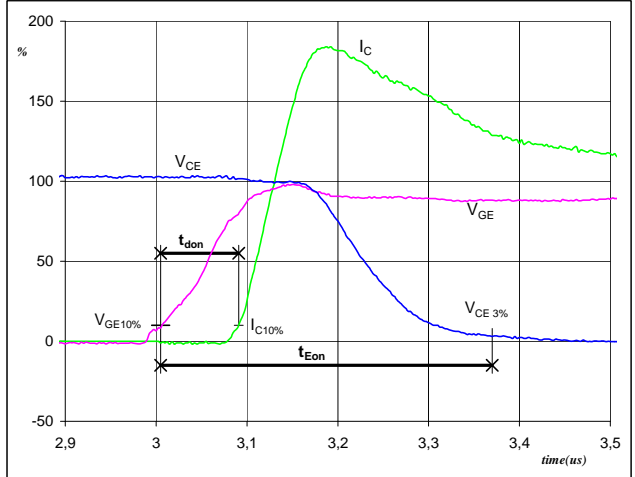
Turn-off Switching Waveforms & definition of t_{doff} , t_{Eoff}
(t_{Eoff} = integrating time for E_{off})



V_{GE} (0%) =	-15	V
V_{GE} (100%) =	15	V
V_C (100%) =	600	V
I_C (100%) =	15	A
t_{doff} =	0,27	μs
t_{Eoff} =	0,63	μs

Figure 2 Output inverter IGBT

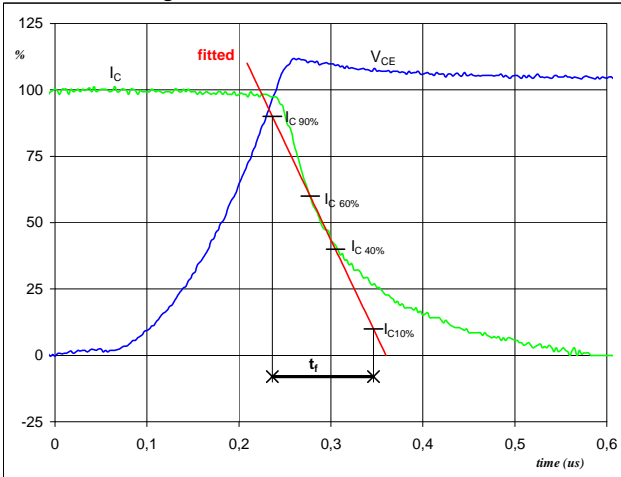
Turn-on Switching Waveforms & definition of t_{don} , t_{Eon}
(t_{Eon} = integrating time for E_{on})



V_{GE} (0%) =	-15	V
V_{GE} (100%) =	15	V
V_C (100%) =	600	V
I_C (100%) =	15	A
t_{don} =	0,09	μs
t_{Eon} =	0,36	μs

Figure 3 Output inverter IGBT

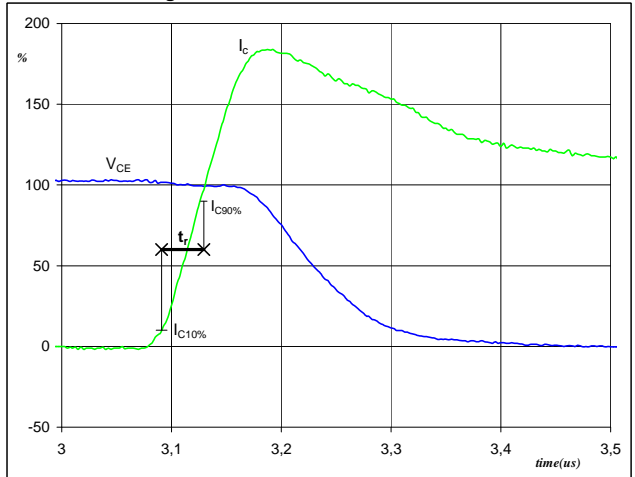
Turn-off Switching Waveforms & definition of t_f



V_C (100%) =	600	V
I_C (100%) =	15	A
t_f =	0,12	μs

Figure 4 Output inverter IGBT

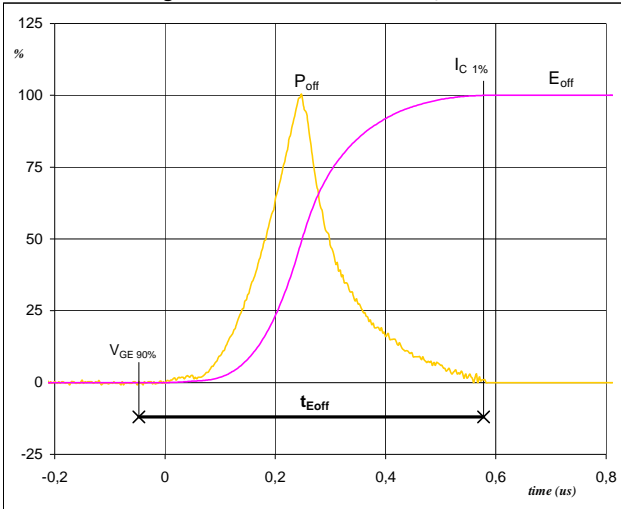
Turn-on Switching Waveforms & definition of t_r



V_C (100%) =	600	V
I_C (100%) =	15	A
t_r =	0,04	μs

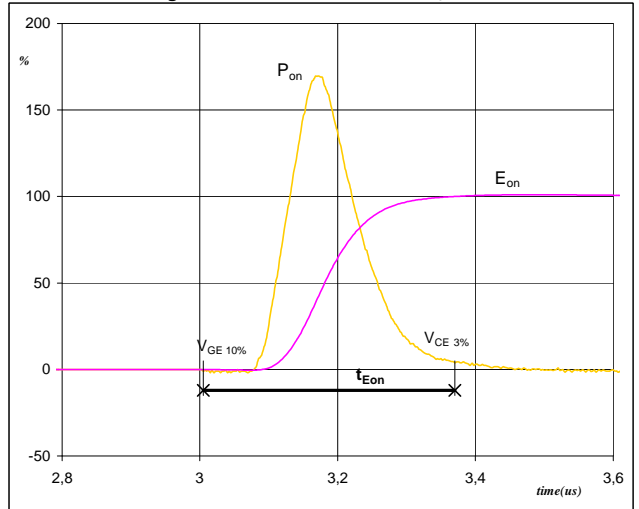
Switching Definitions Output Inverter

Figure 5 Output inverter IGBT

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


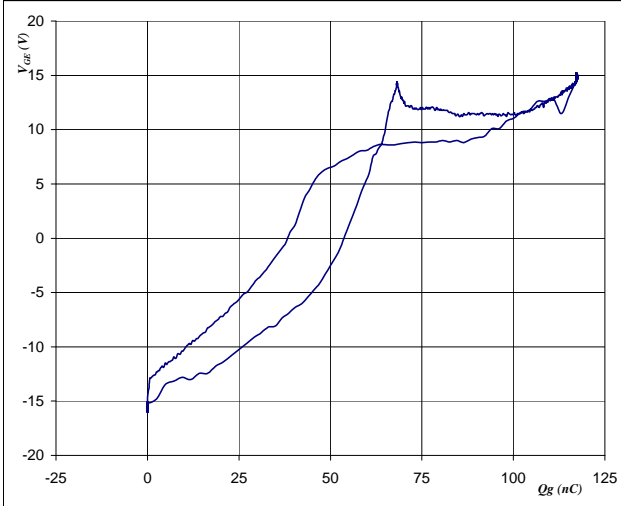
P_{off} (100%) =	8,98	kW
E_{off} (100%) =	1,39	mJ
t_{Eoff} =	0,63	μ s

Figure 6 Output inverter IGBT

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


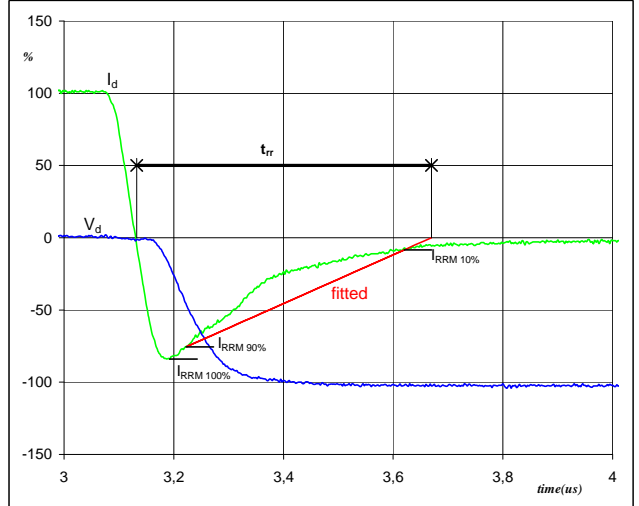
P_{on} (100%) =	8,98	kW
E_{on} (100%) =	1,76	mJ
t_{Eon} =	0,36	μ s

Figure 7 Output inverter IGBT

Gate voltage vs Gate charge (measured)


V_{GEoff} =	-15	V
V_{GEon} =	15	V
V_C (100%) =	600	V
I_C (100%) =	15	A
Q_g =	117,46	nC

Figure 8 Output inverter FWD

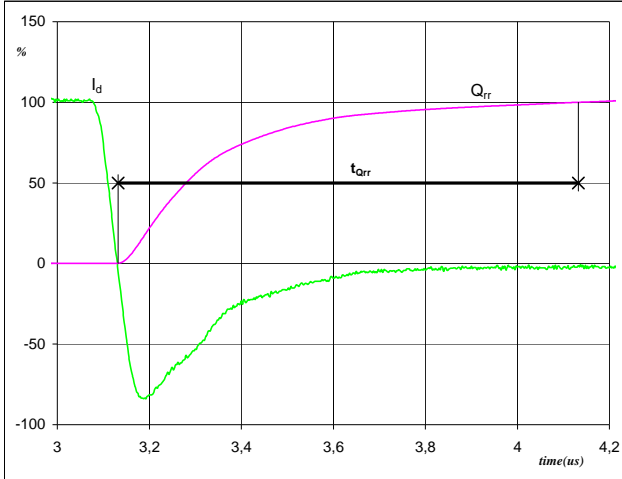
Turn-off Switching Waveforms & definition of t_{rr}


V_d (100%) =	600	V
I_d (100%) =	15	A
I_{RRM} (100%) =	-13	A
t_{rr} =	0,51	μ s

Switching Definitions Output Inverter

Figure 9 Output inverter FWD

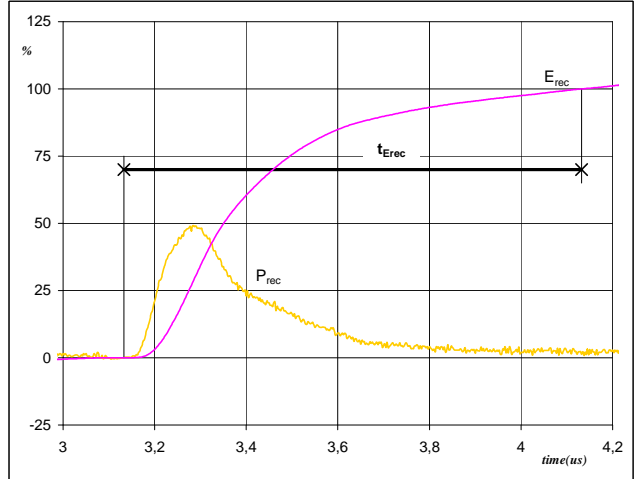
Turn-on Switching Waveforms & definition of t_{Qrr}
 (t_{Qrr} = integrating time for Q_{rr})



I_d (100%) =	15	A
Q_{rr} (100%) =	2,94	μC
t_{Qrr} =	1,00	μs

Figure 10 Output inverter FWD

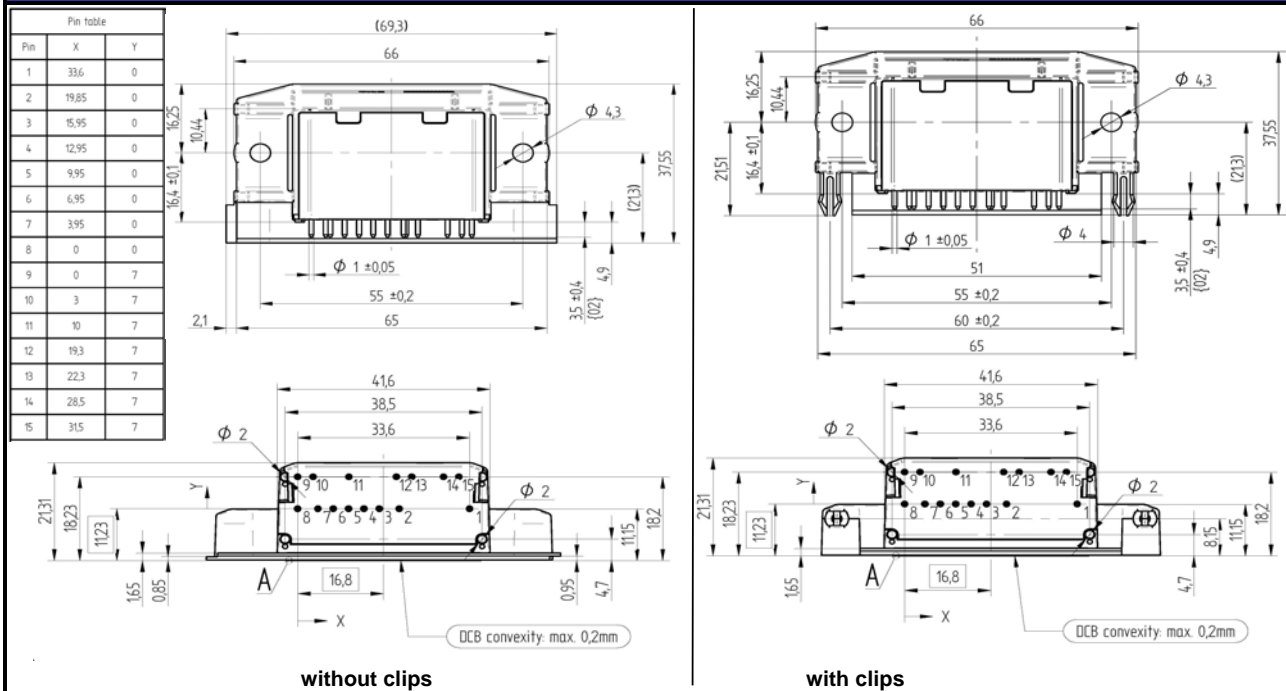
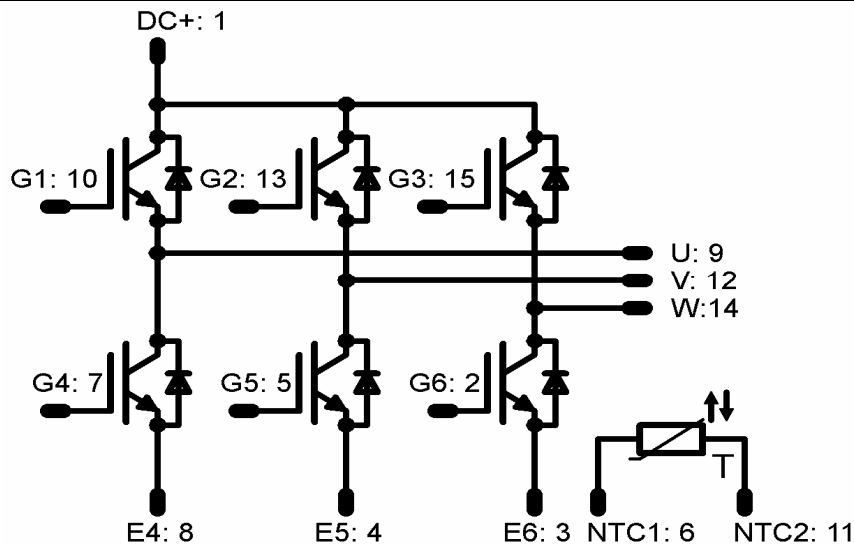
Turn-on Switching Waveforms & definition of t_{Erec}
 (t_{Erec} = integrating time for E_{rec})



P_{rec} (100%) =	8,98	kW
E_{rec} (100%) =	1,18	mJ
t_{Erec} =	1,00	μs

Ordering Code and Marking - Outline - Pinout
Ordering Code & Marking

Version	Ordering Code	in DataMatrix as	in packaging barcode as
without thermal paste ,housing without clips	10-RZ126PA015SC-M628F41	M628F41	M628F41
without thermal paste ,housing with clips	10-R0126PA015SC-M628F40	M628F40	M628F40

Outline

Pinout


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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.