

— RB-IGBT 600V —

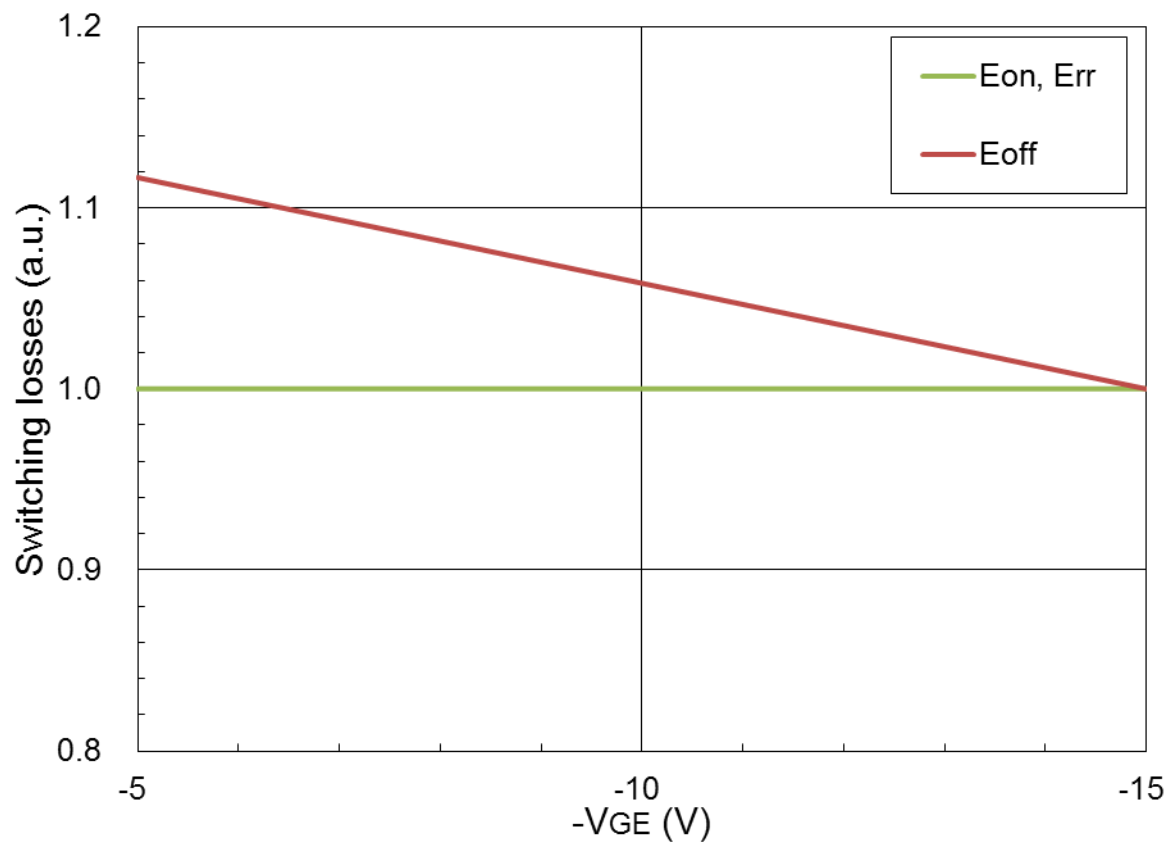
Switching loss characteristics vs. -V_{GE}

Measured module: 4MBI300VG-120R-50 (RB-IGBT=600V)

Measured condition: A-mode (T₂=switching)

T_j=RT, V_{cc}=400V, I_C=300A, V_{GE}=15V, -V_{GE}=var., R_G=+10/-1Ω

The data below shows switching loss in dependency of the negative bias of the gate voltage signal (-V_{GE}).

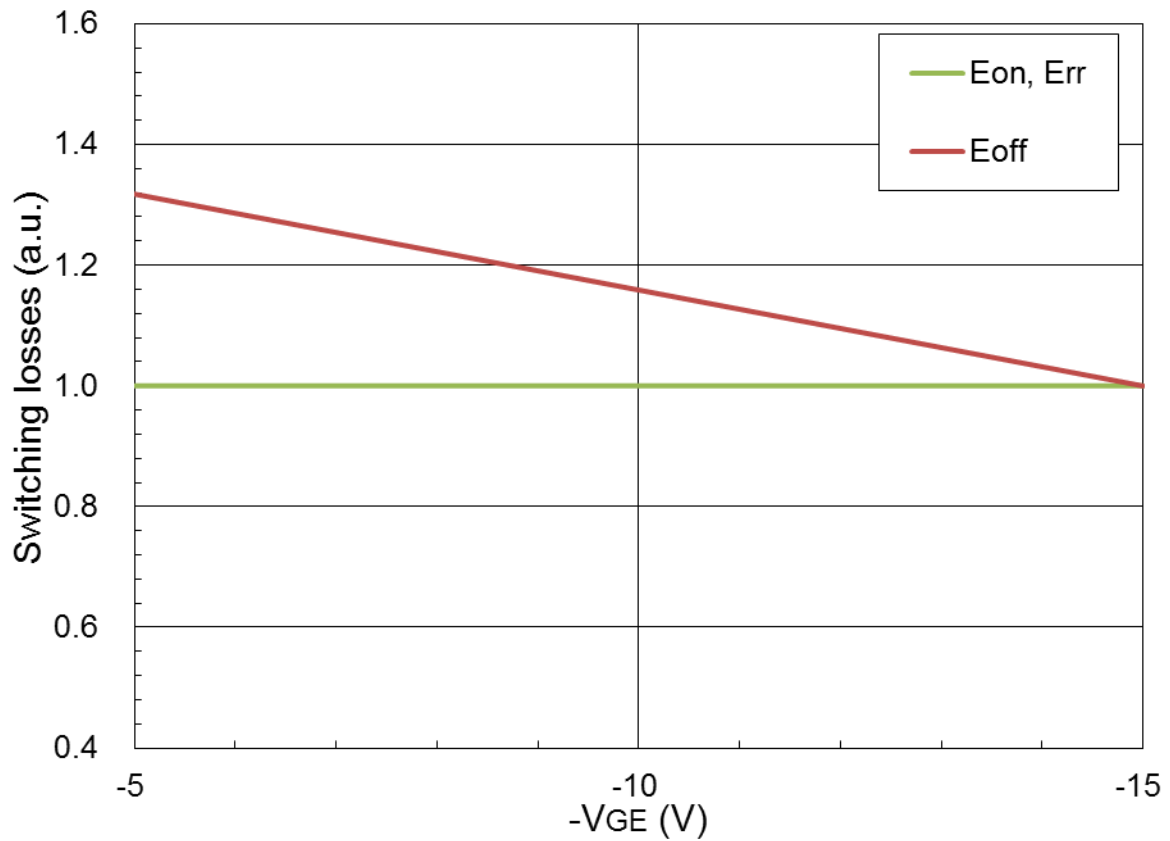


Measured module: 4MBI300VG-120R-50 (RB-IGBT=600V)

Measured condition: B-mode (T4=switching)

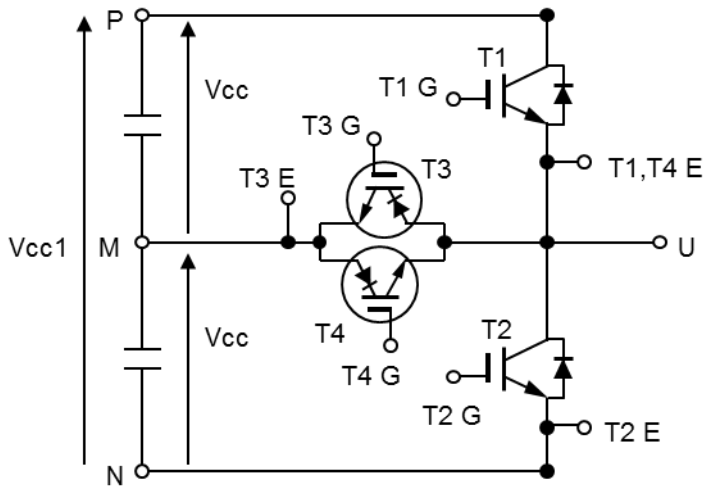
$T_j=RT$, $V_{cc}=400V$, $I_C=300A$, $V_{GE}=15V$, $-V_{GE}=var.$, $R_G=+8.2/-39\Omega$

The data below shows switching loss in dependency of the negative bias of the gate voltage signal ($-V_{GE}$).



Appendix

Circuit diagram



Switching modes

SW Mode	Load L	T1	T2	T3	T4
A	M – U	SW	OFF	OFF	ON
	M – U	OFF	SW	ON	OFF
B	P – U	OFF	OFF	SW	ON
	U – N	OFF	OFF	ON	SW

SW: Connection to drive circuit and input gate signal

ON: Bias voltage of gate + 15V

OFF: Bias voltage of gate - 15V

$V_{cc1} = 2 \cdot V_{cc}$

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