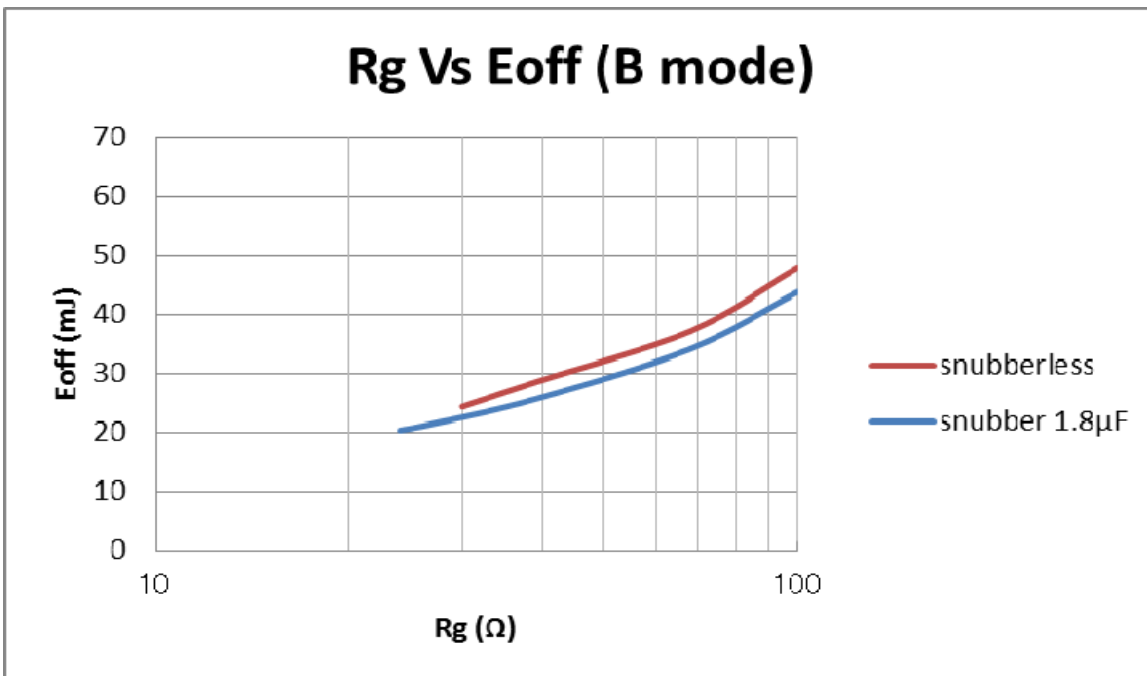
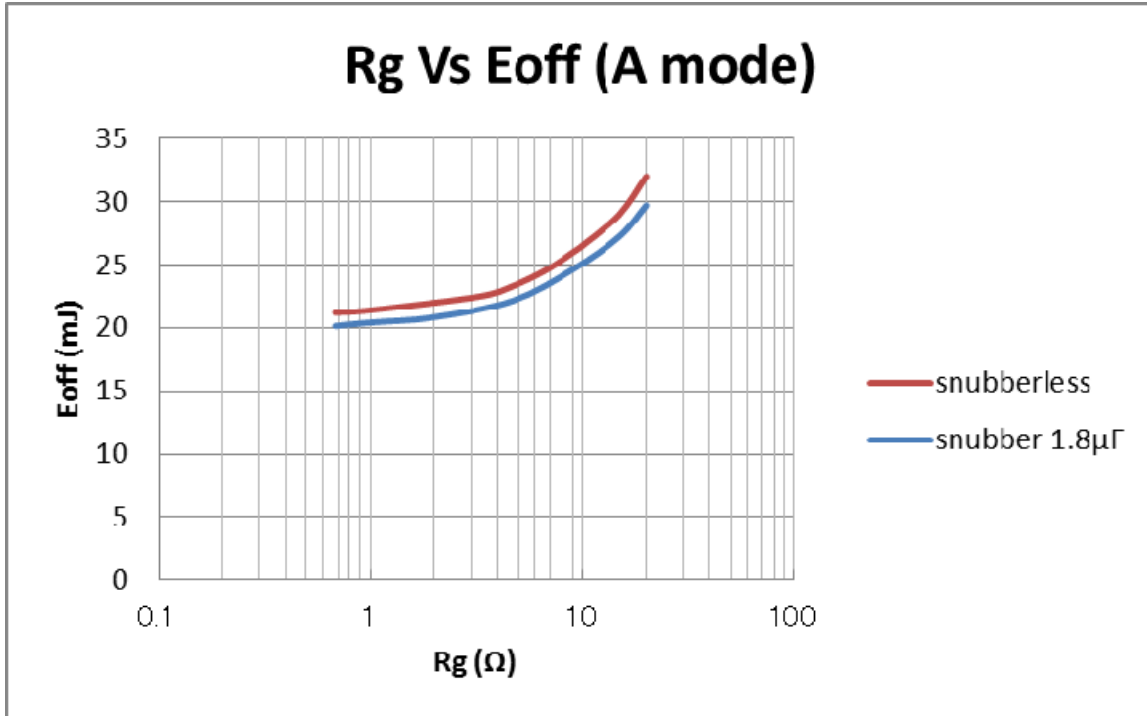


— RB-IGBT module 4MBI300VG-120R-50 —

Dependence of Eoff on gate resistance by effect of snubber and CGE

Measured module: 4MBI300VG-120R-50

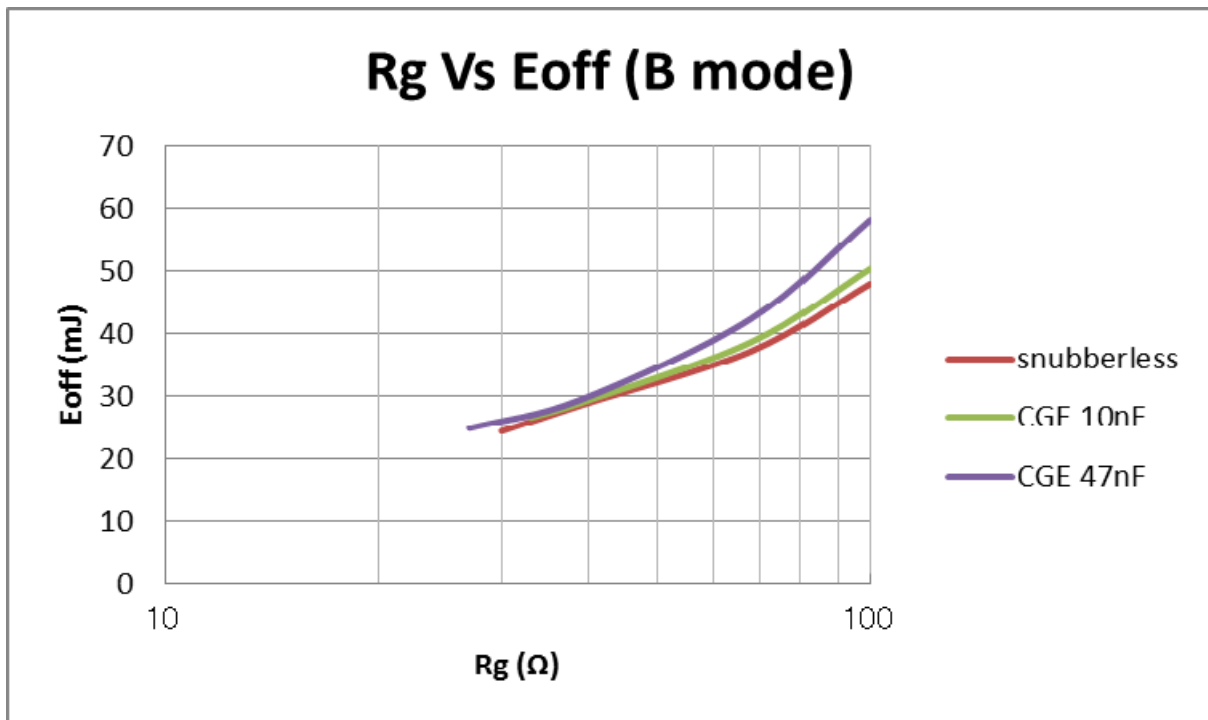
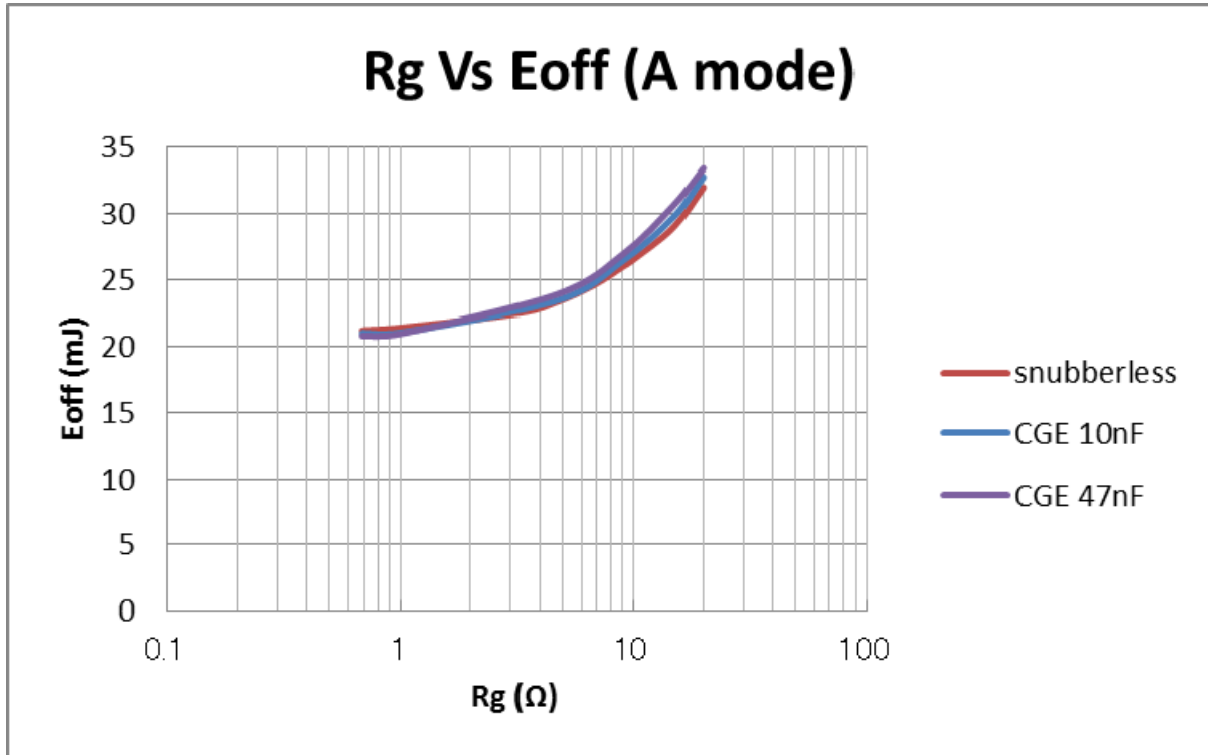
Measured condition: Vdc=400V, Ic=300A, Vge=+/-15V, Tj=125°C, Rg= variable



Dependence of Eoff on gate resistance by effect of snubber

Measured module: 4MBI300VG-120R-50

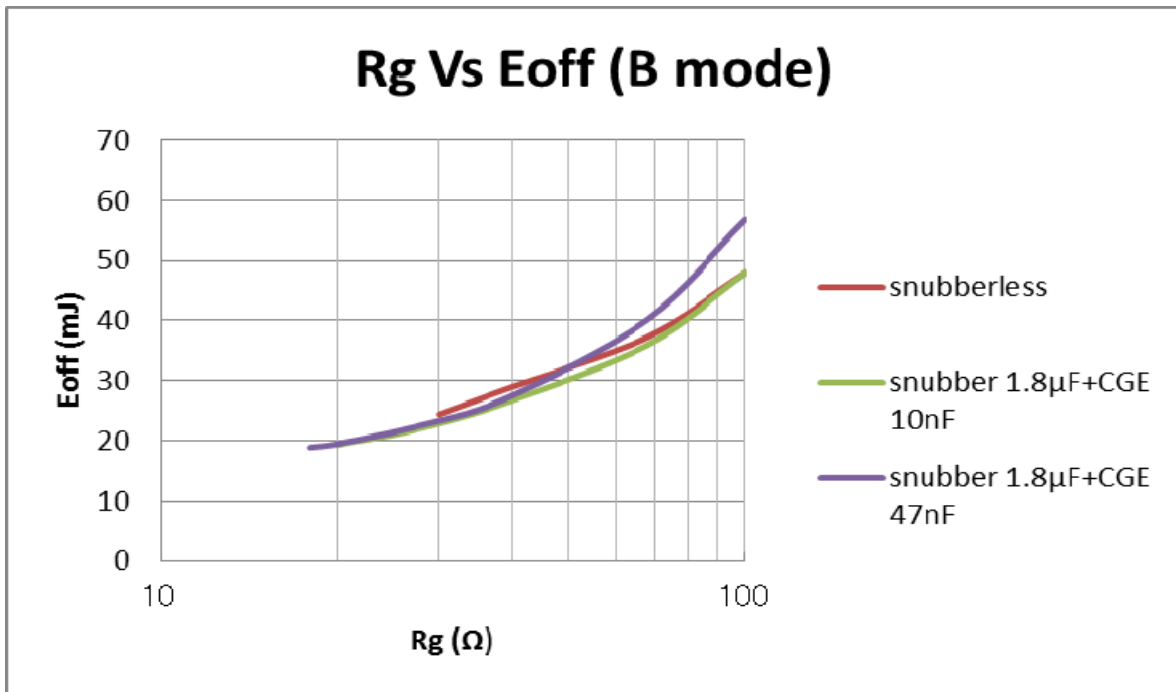
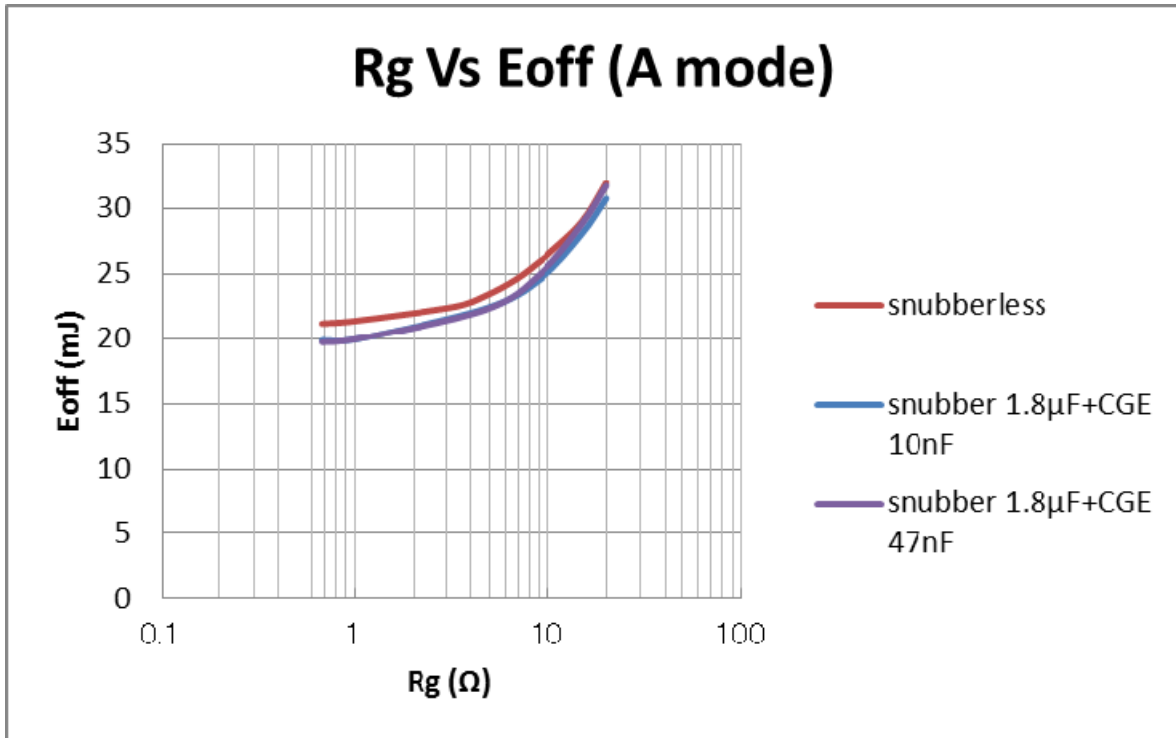
Measured condition:  $V_{dc}=400V$ ,  $I_c=300A$ ,  $V_{ge}=\pm 15V$ ,  $T_j=125^\circ C$ ,  $R_g$ = variable



Dependence of Eoff on gate resistance by effect of CGE

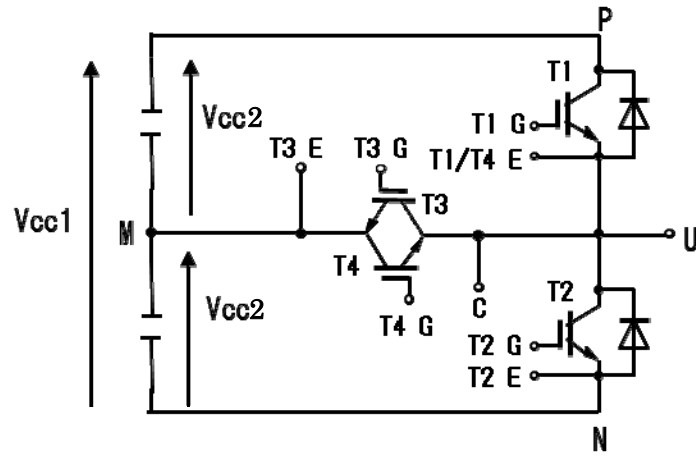
Measured module: 4MBI300VG-120R-50

Measured condition: Vdc=400V, Ic=300A, Vge=+/-15V, Tj=125°C, Rg= variable



Dependence of Eoff on gate resistance by effect of snubber and CGE

**Definitions of switching mode**



SW mode	Load L	T1	T2	T3	T4
A	M-U	<b>SW</b>	OFF	OFF	<b>ON</b>
	M-U	OFF	<b>SW</b>	<b>ON</b>	OFF
B	P-U	OFF	OFF	<b>SW</b>	<b>ON</b>
	U-N	OFF	OFF	<b>ON</b>	<b>SW</b>

SW: Connect to drive circuit and input gate signal  
 ON: Bias voltage of gate +15V  
 OFF: Reverse bias voltage of gate -15V  
 $V_{cc2} = V_{cc1}/2$

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