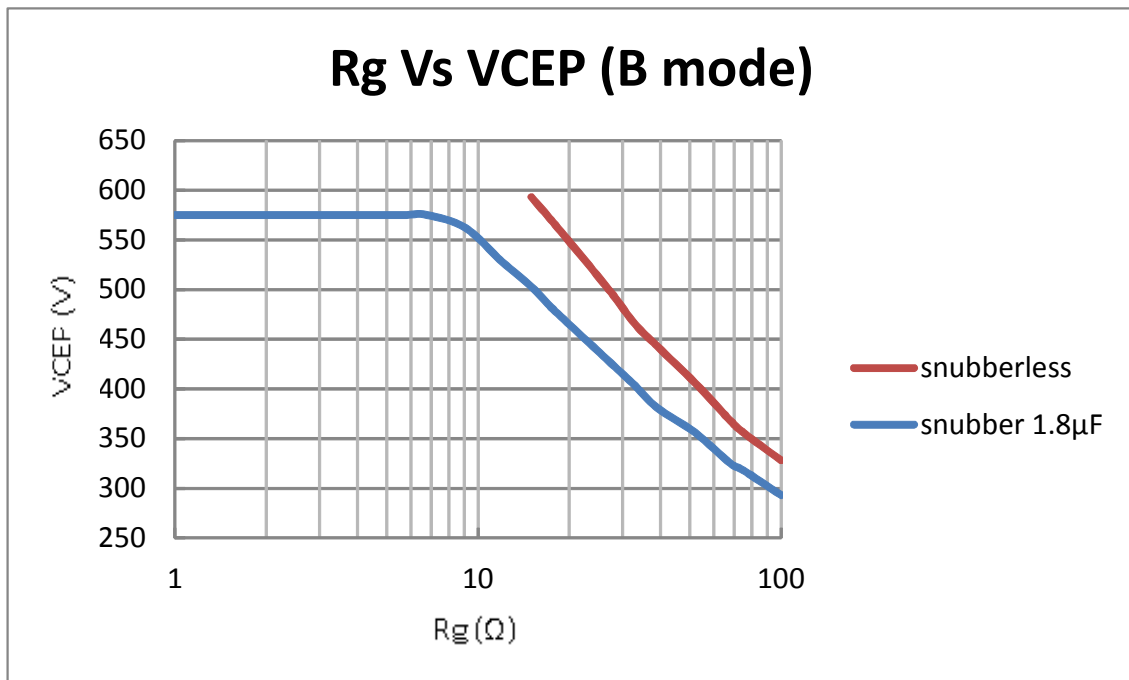
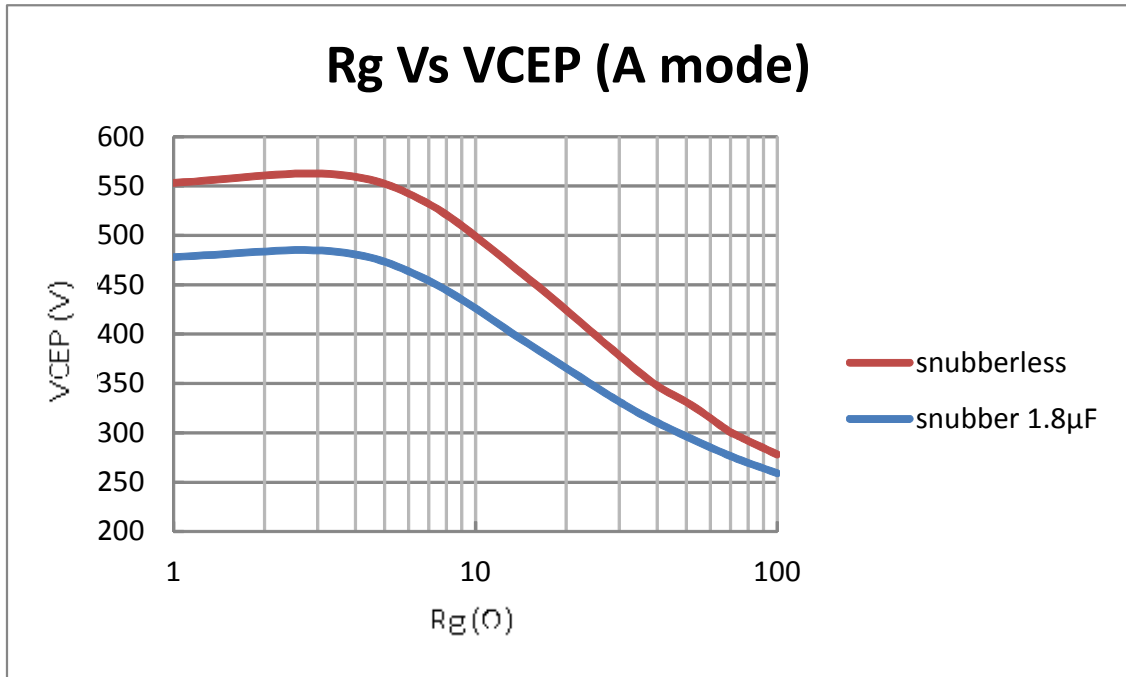


— RB-IGBT module 4MBI400VG-060R-50 —

Dependence of spike voltage on gate resistance by the effect of snubber and CGE

Measured module: 4MBI400VG-060R-50

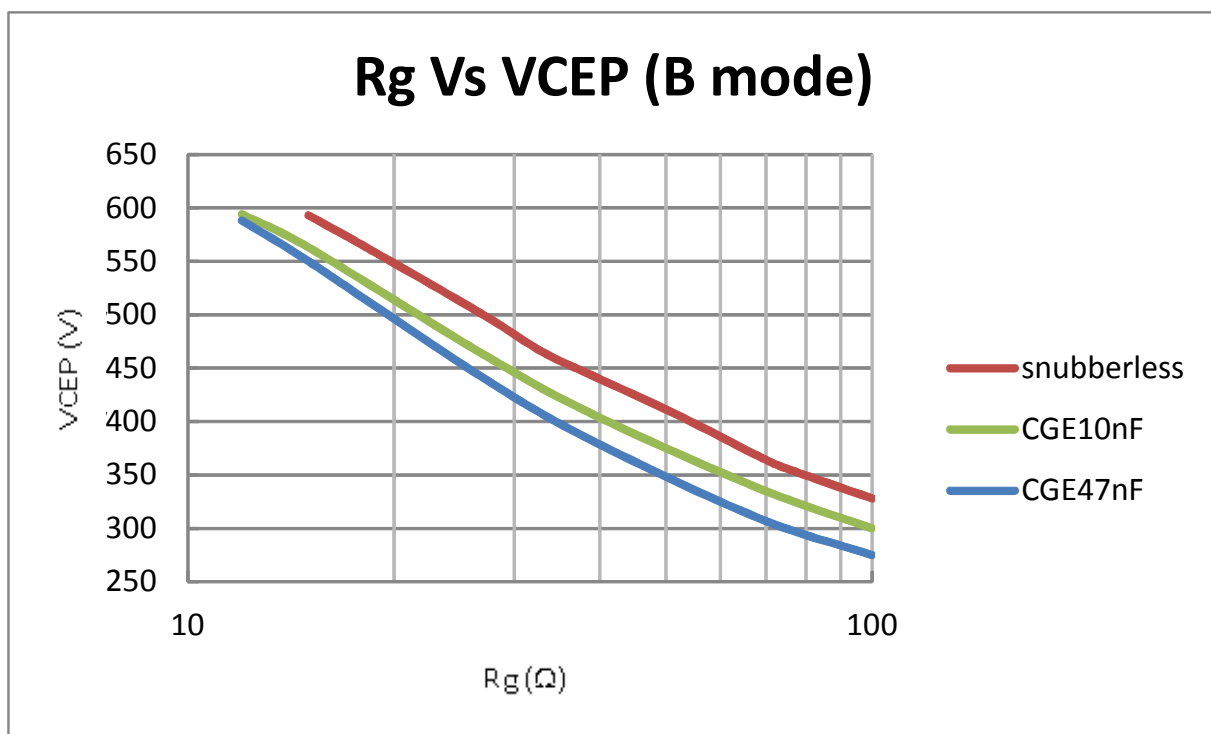
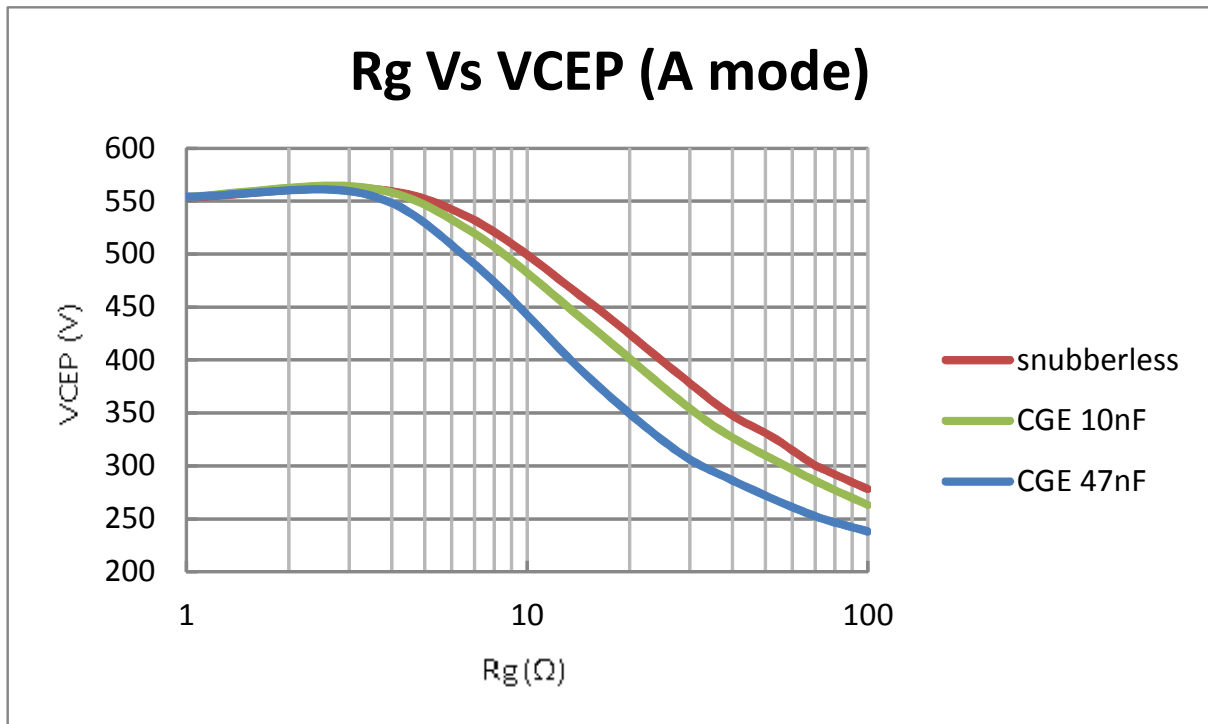
Measured condition: Vdc=200V, Ic=400A, Vge=+/-15V, Tj=125°C, Rg= variable



Dependence of spike voltage on gate resistance by the effect of snubber

Measured module: 4MBI400VG-060R-50

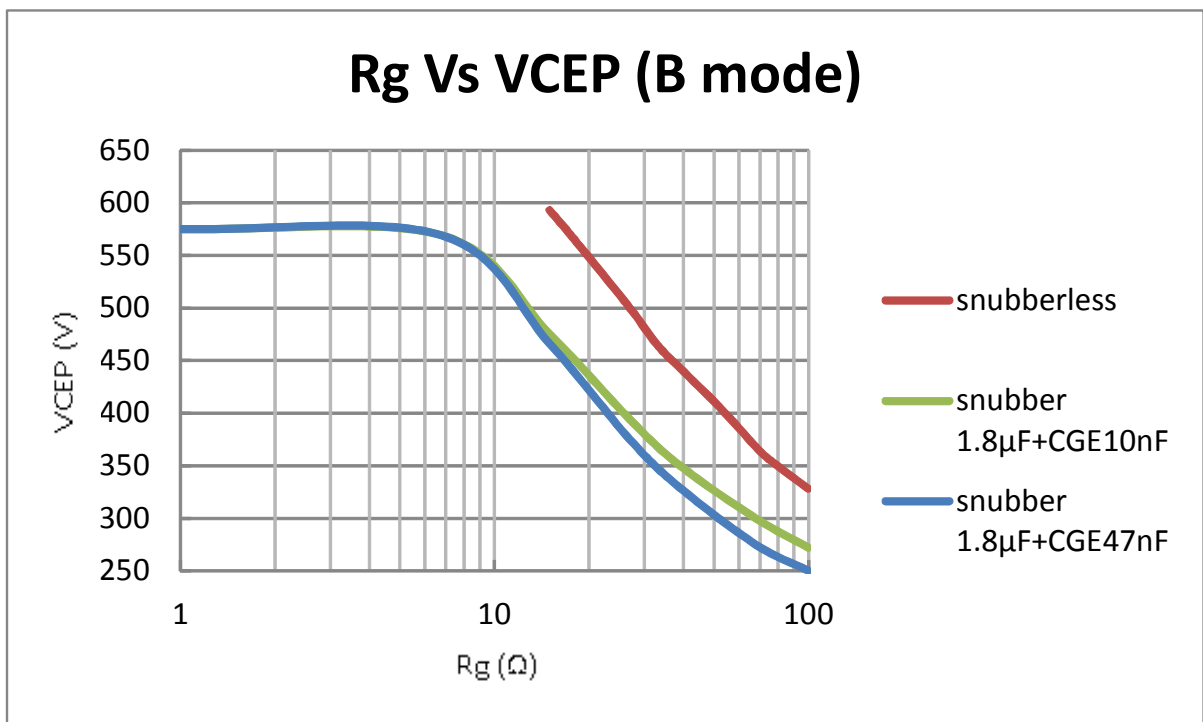
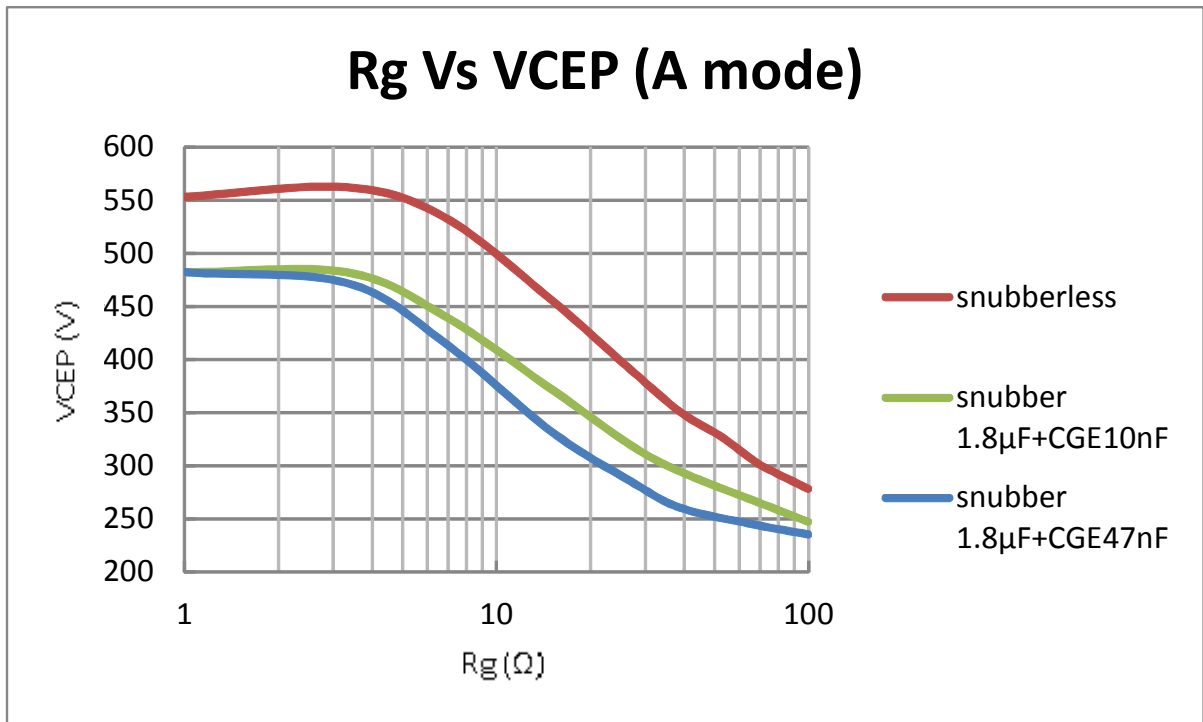
Measured condition: Vdc=200V, Ic=400A, Vge=+/-15V, Tj=125°C, Rg= variable



Dependence of spike voltage on gate resistance by the effect of CGE

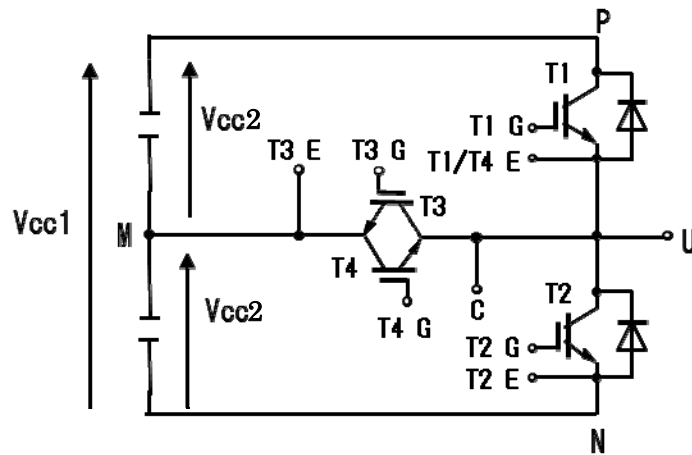
Measured module: 4MBI400VG-060R-50

Measured condition: Vdc=200V, Ic=400A, Vge=+/-15V, Tj=125°C, Rg= variable



Dependence of spike voltage on gate resistance by the 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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