EUPEC Paralleling of IGBTs

Effective factors for current sharing:

static	dynamic
-	ΔL_{σ}
-	ΔL_{wire} , Δt_{on} , Δt_{off}
$\Delta Vce_{sat'} \Delta T_j$	$\Delta T_{j'} \Delta td_{on'} \Delta td_{off}$
	static - - ΔVce _{sat} , ΔT _j

Recommendations:

symmetrical design of IGBT current paths (identical stray inductances) symmetrical design of gate driver (same driver stage, seperate gate resistors, splitted Rg with appr. 1/3 of it in the emitter leads) use devices of one production lot (smallest parameter deviations guaranteed) symmetrical cooling conditions (identical heat-sink temperature and flow rate below the paralleled devices)

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