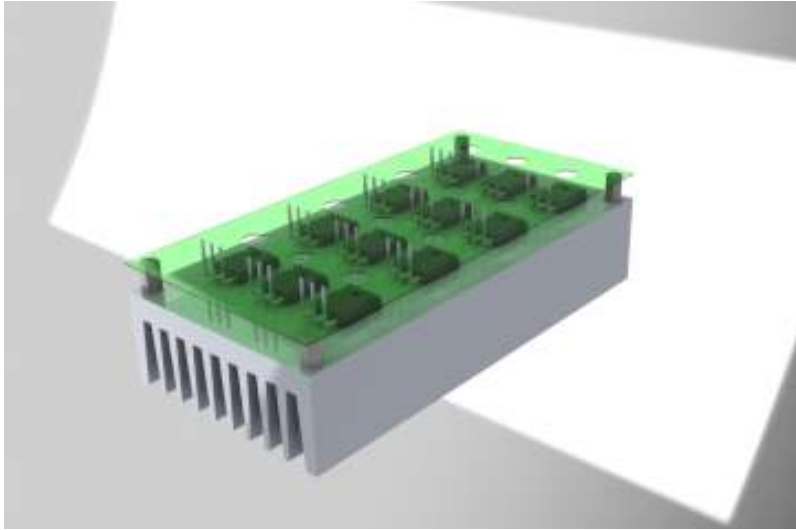
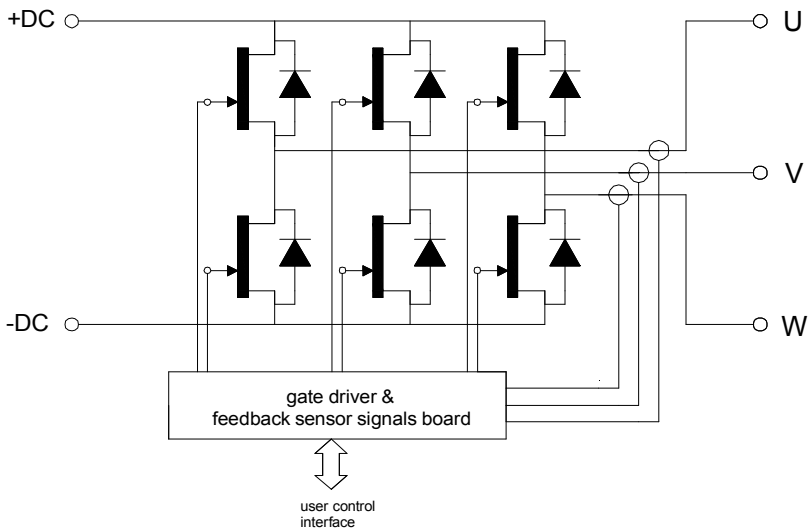
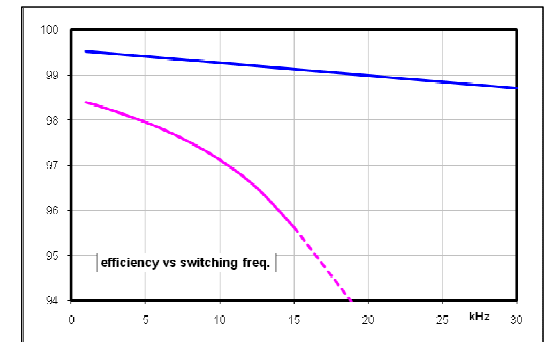
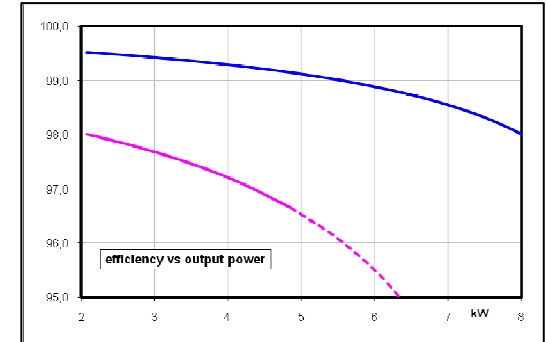
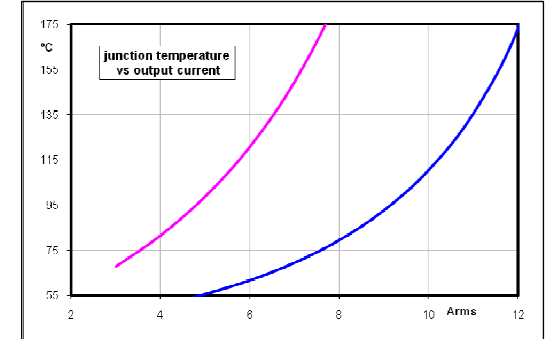


Introducing silicon carbide JFET power stack POWER STACK COMPARISON



	SILICON COMPETITOR	SJEP120R063
Technology	High speed IGBT in trench and fieldstop technology	Normally-OFF Trench Silicon Carbide Power JFET
Max. Voltage	1200V	1200V
Nominal current	25A	20A
Max. Junction Temperature	175°C	175°C
Positive Temp. Coefficient for Ease of Paralleling	YES	YES
Junction to case thermal resistance	0,46 K/W	0,6 K/W
Voltage drop @ 10A	1,6V	1,1V
ON+OFF energy switching @600V/10A	1,2mJ	205uJ
Tail current	YES	NO

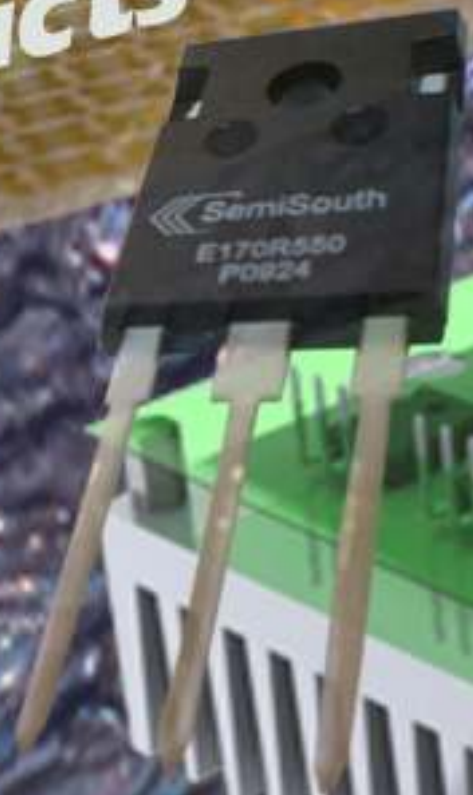


Simulation of a power stack working as 400Vrms three-phase inverter including the freewheeling diodes. The simulation was with a Si IGBT and a SiC JFET(\*) under the same conditions. The devices are TO-247 housing. The stack is assembled over an extruded heatsink.

- SILICON COMPETITOR
- SJEP120r063
- - - Junction temperature exceeds of 175°C (\*)FWD SDP20S120D

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