Pulsed Power Energy Delivery Systems

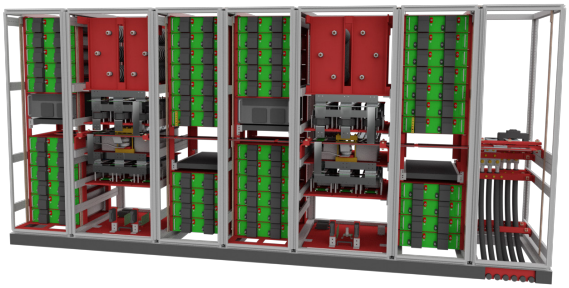
Power Assemblies

Dynex have been supplying semiconductor devices for a wide range of applications including the delivery of energy at extremely high currents for short durations.

We have now developed a number of complete power supply power converter systems which enable our customers to control the delivery of this energy using Thyristor, GTO and IGBT technology to provide the best solutions.

We have power supplies that utilise the latest energy storage techniques with batteries or ultracapacitors, as well as conventional capacitors and the output of our supplies will deliver controlled DC pulses or AC pulses using H bridge topology with IGBT modules.

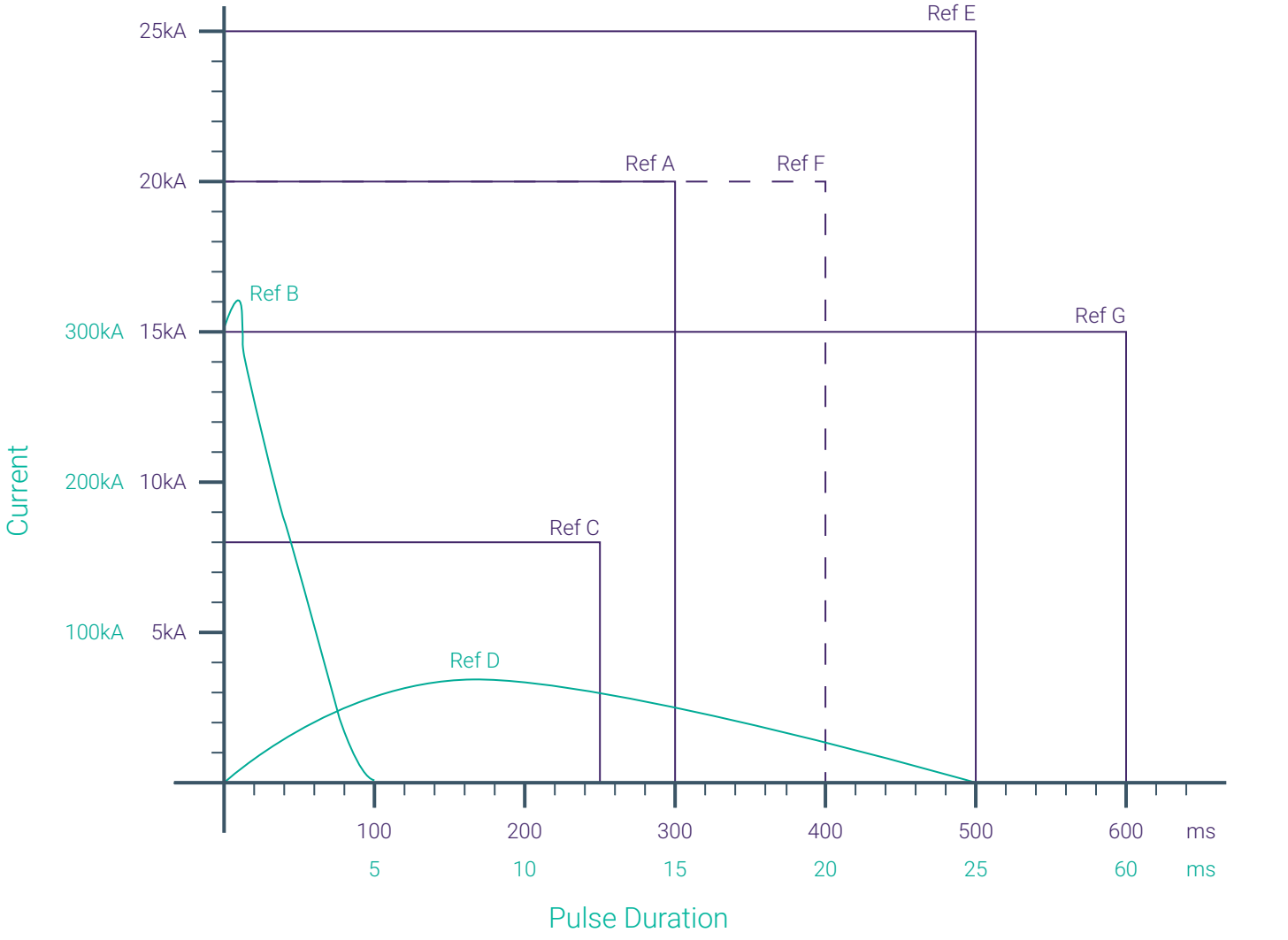
Voltages up to 30kV and currents up to 40,000A DC have been generated by our range of power supplies for applications in ***high power protection circuit testing***, ***tokamak generator supplies***, ***lightning simulation***, ***magnet control***, ***UPS and sag protection***.



Very high current power supply systems

The following table and graph represent some of the projects that Dynex Semiconductor have provided for our customers over the past 3 years.

Project	Peak Current	Supply Voltage	Pulse Duration	Energy	Delivery Type
Ref A	20 kA	1,200 V	300 ms	7.2 MJ	Controllable
Ref B	320 kA	2,000 V	2 ms	300 kJ	Exponential Discharge
Ref C	8 kA	2,000 V	250 ms	4.0 MJ	Controlled
Ref D	50 kA	11 kV	25 ms	1.8 MJ	Exponential Discharge
Ref E	±25 kA	500 V	500 ms	7.0 MJ	4 Quadrant Controlled
Ref F	±20 kA	600 V	500 ms	5.5 MJ	4 Quadrant Controlled
Ref G	± 15 kA	900 V	600 ms	8.1 MJ	4 Quadrant Controlled



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