



## Qualification of Clas-SiC Wafer Fab

As a global supplier of silicon carbide power devices, SemiQ has undertaken a major initiative to build a fully redundant supply chain. Critically, this includes wafer fabrication of our silicon carbide products. The new wafer fabrication site is Clas-SiC Wafer Fab, in Lochgelly, Scotland. Clas-SiC Wafer Fab, along with our existing wafer fabrication partner, X-Fab in Lubbock, Texas, will be producing SiC diodes and MOSFET devices.

Full qualification completed August 01, 2022. The table below summarizes the reliability testing protocol and results.

GP2T080A120U 1200V SiC MOSFET Qualification Summary:

<b>JEDEC Test</b>	<b>Duration</b>	<b>Number of Lots</b>	<b>Total Samples</b>	<b>Number of Fails</b>	<b>JEDEC Result</b>
<b>HTRB</b>	1000 Hours	3	240	0	Pass
<b>HTGB +25V</b>	1000 Hours	3	240	0	Pass
<b>HTGB -10V</b>	1000 Hours	3	240	0	Pass
<b>H3TRB</b>	1000 Hours	3	240	0	Pass
<b>TC</b>	2000 Cycles	3	121	0	Pass
<b>UHAST</b>	96 Hours	3	90	0	Pass
<b>HTSL</b>	1000 Hours	3	90	0	Pass
<b>IOL</b>	3000 Cycles	3	66	0	Pass
<b>ESD HBM</b>	Pulse at 1000V	1	3	0	Pass
<b>ESD CDM</b>	Pulse at 1000V	1	3	0	Pass

SemiQ has worked closely with Clas-SiC Wafer Fab to ensure equivalent process technologies are utilized to fabricate SemiQ SiC diodes and MOSFET devices that meet all existing datasheet specifications, and can sell under the same product numbers.

Lot numbering marked on product will ensure traceability through the entire supply chain. As has always been SemiQ's policy, products built by different suppliers will not be mixed within an assembly, or within the inner cartons of a shipment.

Should you have any further questions, please contact SemiQ Sales.