Beam Chopper

For PU-EQ 22

- Allows switching of the electron beam by an external trigger signal up to 10 kHz
- Adaptable to all EQ 22/35 packages
- Beam energy up to 2.5 keV
- Pulse width 1-10 µs, 10-100 µs or cw
- Constant delay time between trigger slope and electron pulse of 270 ns
- Rise time ~ 50 ns
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Timing Diagram

- Required external trigger signal: TTL pulse with minimum width of 200 ns
- Monitor signal of the trigger signal with delay time t1 of about 70 ns
- Switch of extractor voltage with a delay time t2 of about 150 ns. The electron beam of the EQ 22 is switched on and off by control of the extractor voltage.
- Beam pulse with a delay time t3 of about 270 ns, a rise time of about 50 ns and adjustable pulse duration t4 between 1 µs and 100 µs.