

## Questionnaire for Pulsed Power Applications

Working in an area where new system designs and experimental systems are invented, we know how difficult it is for the designer and the supplier of components to select the right parts for the application.

Because the selection of components is often not based on datasheet figures, Astrol Electronic AG is offering a service to support customers with the selection of the right switch assembly.

Therefore, please answer the questions below as detailed as possible:

- 1) **Company / Organisation:**   
 Address:   
 City:
- 2) **Contact Person:**  **Phone:**  **E-mail:**
- 3) **What is the Application:**
- 4) **Which status has the project:**
- Research
  - Development
  - Prototype
  - Series Production

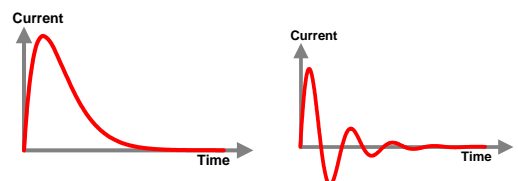
### Questions for selecting the semiconductor components or switch assembly:

5) **What Power Source is used:**  Capacitor:  Other(specify):

6) **Charge Voltage:**  V

7) **Peak Pulse Current level:**  A

8) **Please specify current waveform:**



- Over damped sine wave:  $R^2C^2 - 4LC > 0$
- Under damped sine wave:  $R^2C^2 - 4LC < 0$
- Other: Please attach sketch \ circuit of the pulse form

9) **Please specify the pulse duration:**  $t_p =$    $\mu\text{sec to peak}$    $\mu\text{s}$  **total**

10) **What is the expected initial di/dt value:**  $di/dt =$    $\text{kA}/\mu\text{s}$

11) **What is the pulse repetition rate:**  $f =$   Hz

12) **Which type of load is used:**

13) **Is there any reverse voltage from the load?**  Yes  No **% of Charge Voltage or**  **V**  Yes  No

14) **Should the component or switch block full voltage direct after the pulse:**  Yes  No

15) **Must the component or switch be in the position to switch "off" the current:**  Yes  No

- 16) How would you trigger the switch:  Optical  Electrical
- 17) How long will the system be in use per day:  Hours per Day
- 18) How many days per year:  Days per Year
- 19) Life-time expectation of the system:  Years or:  Pulses
- 20) Ambient temperature range:  °C
- 21) Operating temperature range:  °C
- 22) In case cooling should be required, do you prefer:
- Convection Air
  - Forced Air
  - De-Ionized Water  Oil
- 23) What is the isolation medium:
- Clean air (Indoor cabinet)
  - Outdoor (Humid air)
  - Air Conditioned area
  - Oil immersion
  - SF-6 Inert gas
- 24) What is your time schedule:
- 25) Any further information which can be important, and please add a circuit diagram:

Please return the completed questionnaire to:

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