

# Applications Engineer Job Description

## About the Company

SBE, Inc. (aka SB Electronics) is a world leader in film capacitor manufacturing based in Barre, Vermont. SBE designs, manufactures, and markets capacitors to numerous companies in a variety of markets throughout the world. The Company has two major product lines, namely; the traditional SBE leaded capacitors manufactured in both Vermont and China and a newer line of high-energy, Vermont-built, capacitors called Power Ring Film Capacitors™ which are rapidly growing in sales for a variety of applications and markets. As a recent recipient of a U.S. Department of Energy grant, SBE is currently expanding its production of Power Rings for use specifically in Electric and Hybrid Electric Vehicles in a new 52,000 square foot facility. See [www.sbelectronics.com](http://www.sbelectronics.com) for more information on the Company's products, technologies, and markets.

## Job Overview

The Application Engineer is responsible for interfacing with customers and application engineering management to design capacitors and specify electrical interconnect structures on a case by case basis. Key to this process will be an understanding of the physical and electrical properties of dielectric materials and the thermodynamic properties of a wound capacitive element and its terminal or bus structure. The ability to ensure self-healing capabilities, and accurately perform MTBF calculations will be crucial to success in this position.

Candidates should have a desire to work in an exciting new field and have the capability to work independently and as a team player on simultaneous projects with compressed timelines. Candidates should also expect limited travel to interface with customers, and attend or exhibit at conferences and trade shows.

## Key Responsibilities

- Work within pre-established, product development guidelines and instructions to perform the task required
- Collaborate with staff members in the design and development of capacitors and system integration methods
- Interpret customer performance requirements and develop optimum price and performance capacitor sections
- Exercise diplomacy in resolving conflicting customer performance expectations
- Convey terminal and bus structure technical requirements to mechanical engineering team members
- Assist in internal test and R&D efforts
- Lead or assist in the development of technical white papers
- Other duties as required

## Requirements

- Minimum of B.S. in E.E. field and/or physics, M.S. preferred; power electronics curriculum preferred
- 5-10 years recent electrical engineering experience, preferably in power electronics
- Pulse power experience beneficial
- Clear, respective and effective oral and written communications skills
- Knowledge of Lean product development
- High results-driven attitude
- Working knowledge of statistics used in reliability
- Able to work with minimal supervision