

Dow-Key Microwave Job Description for Mechanical Design Engineer

Summary:

Using advanced education and specialized skills, performs mechanical design of advanced electronic/electromechanical switches, filters and other related assemblies from concept through production release.

Typical Responsibilities:

- Performs detailed mechanical design work supported by solid modeling using Solidworks application software
- Performs thorough dimensional and tolerance analysis from the concept phase to the final release of new or redesigned products
- Designs electromechanical actuators using magnetic circuit analysis
- Performs thermal, stress and vibration analysis of electromechanical switches, filters and assemblies using COSMOS finite element analysis software
- Reviews and approves the design drafts of drawing package
- Assists the Sales Department with technical proposal writing and cost analysis
- Interfaces with customers at various task levels of the project including PDR, CDR and MRR presentations
- Reviews customer specifications and generates project task list and timetable
- Generates analysis report based on customer Supplier Data Requirement List
- Oversees procurement of parts and assists vendors during manufacturing process
- Interfaces with Quality Assurance staff and contributes to Failure Analysis Reports
- Supports production line and provides manufacturing instructions

Supervision: Does not supervise anyone

Knowledge Skills and Abilities:

- Graduate degree in Mechanical Engineering and at least five years in design and development of precision electromechanical devices
- Demonstrated proficiency in all aspects of advanced product development.
- Experience using SolidWorks modeling and COSMOS structural and thermal analysis software
- Ability to work on multiple projects simultaneously from conception to product release
- Supports the set ups of the environmental test stations such as vibration, acceleration and thermal vacuum test chambers
- Knowledge of microwave packaging and waveguide assembly is desirable