Digital Isolators Basics
Creepage and Clearance Quiz
TI Precision Labs – Isolation

Additional Resources:
Analog Applications Journal
Precision Labs Isolation – Creepage and Clearance Quiz

1. True or False:
   Because creepage and clearance specifications prevent in air arcing, required distances are independent of isolation technology.

2. True or False:
   Tracking is the accumulation of pollutants on the surface of the isolator creating conductive paths.

3. What is the term for any spacing rule that is applied between conductive elements over an insulating surface?

4. What determines the CTI of an isolator?

5. At a working voltage of 1kV in a pollution level 2 environment, what would be the optimal material group to use if minimal board layout was desired?
Precision Labs Isolation – Creepage and Clearance Quiz

1. True or False:
   Because creepage and clearance specifications prevent in air arcing, required distances are independent of isolation technology.
   
   **False: Newer devices with higher CTI offer reduced creepage and clearance in many cases.**

2. True or False: Tracking is the accumulation of pollutants on the surface of the isolator creating conductive paths.
   
   **False Tracking is the deterioration of package surfaces increasing susceptibility to creation of conductive paths.**

3. What is the term for any spacing rule that is applied between conductive elements over an insulating surface? **Creepage**

4. What determines the CTI of an isolator? **Material Group**

5. At a working voltage of 1kV in a pollution level 2 environment, what would be the optimal material group to use if minimal board layout was desired? **Material Group I**