

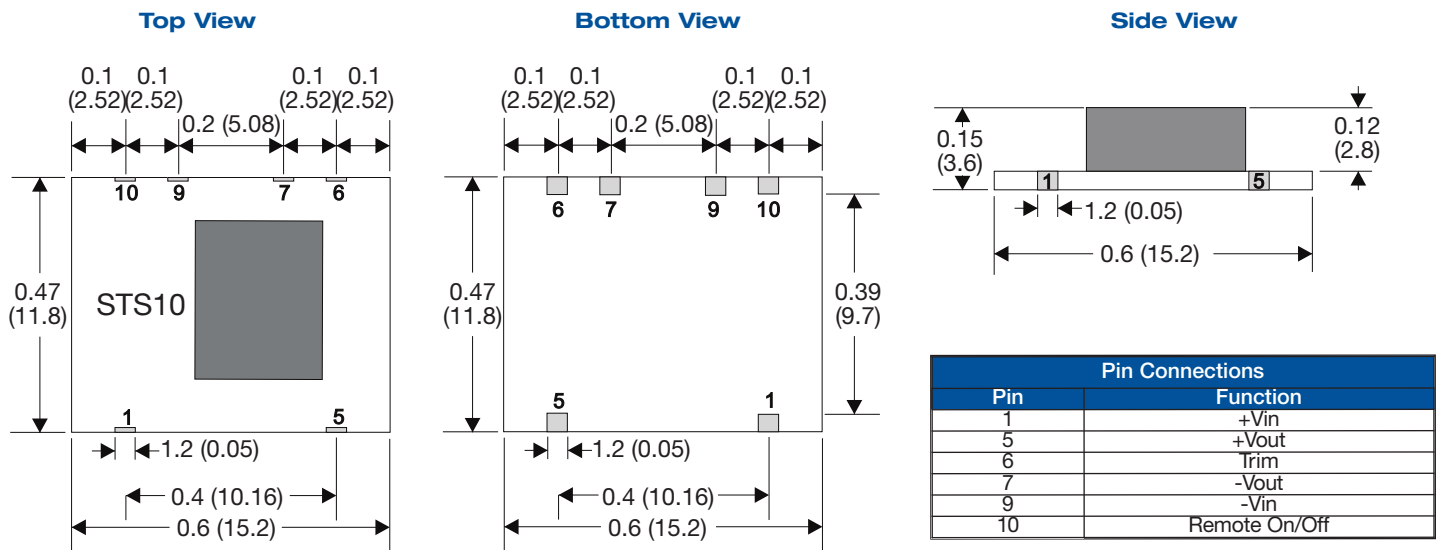
### EMC: Emissions

| Phenomenon | Standard | Test Level | Notes & Conditions                             |
|------------|----------|------------|--|
| Conducted  | EN55032  | Class B    | With external components, see application note |
| Radiated   | EN55032  | Class B    |  |

### EMC: Immunity

| Phenomenon      | Standard    | Test Level          | Criteria | Notes & Conditions   |
|-----------------|-------------|---------------------|----------|----------------------|
| ESD             | EN61000-4-2 | ±8 kV air discharge | A        |                      |
| Radiated        | EN61000-4-3 | 3 V/m               | A        |                      |
| EFT/Burst       | EN61000-4-4 | ±0.5 kV             | A        | See application note |
| Surge           | EN61000-4-5 | ±1 kV               | A        | See application note |
| Conducted       | EN61000-4-6 | 3 V rms             | A        |                      |
| Magnetic Fields | EN61000-4-8 | 3 A/m               | A        |                      |

### Mechanical Details



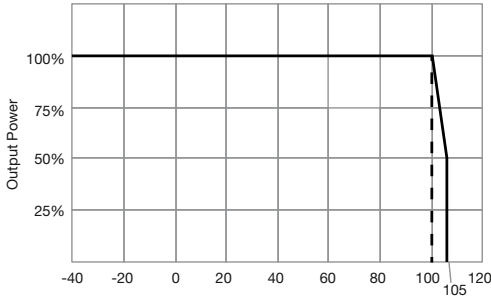
### Notes

- All dimensions are in inches (mm)
- Weight: 0.0022 lbs (1.4 g) approx.
- Pin Profile Tolerance: ±0.004 (±0.1)
- Pin Pitch Tolerance: ±0.01 (±0.25)
- Other Tolerances: ±0.02 (±0.5)

### Application Notes

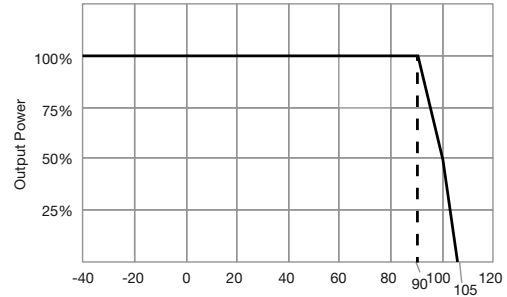
#### Derating Curve

##### STS1005



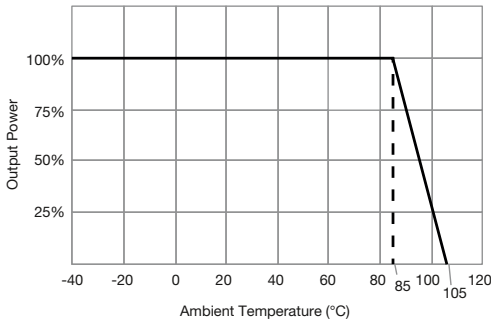
##### STS1024

Vo= 1.2 V and 1.5 V



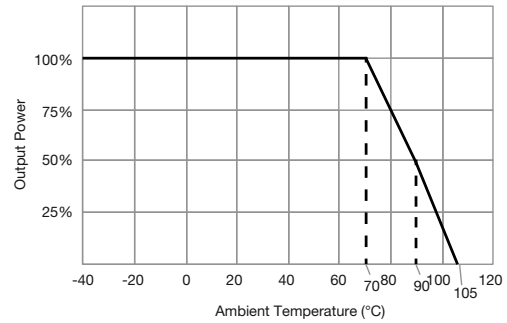
##### STS1024

Vo= 1.8 V, 2.5 V, 3.3 V and 5 V



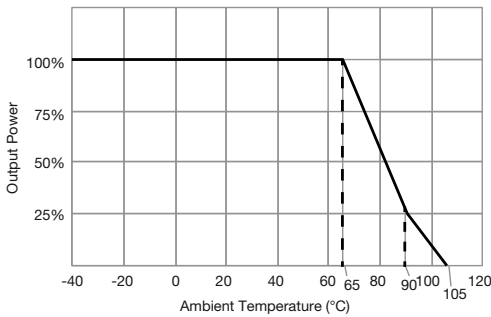
##### STS1024

Vo= 6.5 V and 9 V

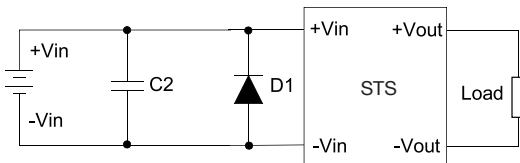


##### STS1024

Vo= 12 V and 15 V



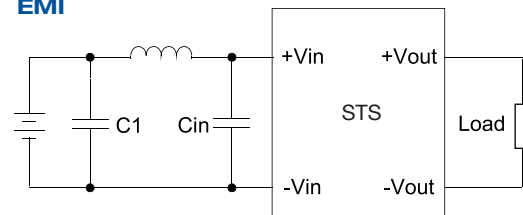
#### EFT & Surge



Suggested Filter : 5Vin models : Nippon - chemi - con KY series, 2200  $\mu$ F/50 V and a TVS, 3 KW , 6.0 V 24 Vin models : Nippon - chemi - con KY series , 330  $\mu$ F/100V and a TVS, 3KW/36V

|      | C2                 | D1          |
|------|--------------------|-------------|
| 5 V  | 2200 $\mu$ F, 50 V | SMDJ 6.0 A  |
| 24 V | 330 $\mu$ F, 100 V | SMDJ 36.0 A |

#### EMI



Input filter components (Cin, C1, L1) are used to help meet EMI requirement for the module. These components should be mounted as close as possible to the module; and all leads should be minimized to decrease radiated noise.

|      | C1                      | L1          | Cin                    |
|------|-------------------------|-------------|------------------------|
| 5 V  | 1206, 10 $\mu$ F, 50 V  | 6.8 $\mu$ H | 1206, 10 $\mu$ F, 50 V |
| 24 V | 1206, 4.7 $\mu$ F, 50 V | 33 $\mu$ H  | 1206, 10 $\mu$ F, 50 V |