

# DVETR

## DVETR2800S Series

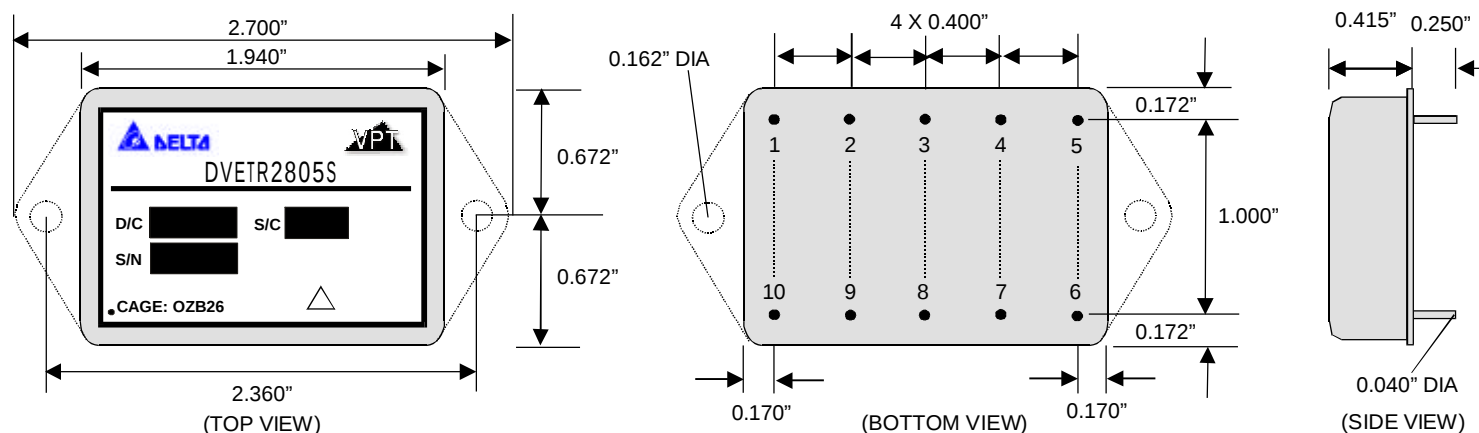
### DC/DC Converters with Built-In Internal EMI Filter

- 15V to 50V Input Range with 80V Transient
- 3.3V, 5V, 12V and 15V Single Outputs Available
- Up to 30W Output Power
- Fault Tolerant Design without OPTO Device
- Built-In Internal EMI Filter Meets MIL-STD-461C CE01, CE03, CE07, CS01 and CS02, and MIL-STD-461D CE101, CE102, and CS101
- Radiation Hardened Version Available
- Low Profile (.415 inches) and Light Weight (50g) Hermetic Package
- -55°C to +125°C Case Temperature Operation
- 500Vdc Input/Output Isolation
- Military and Space Environmental Screenings Available

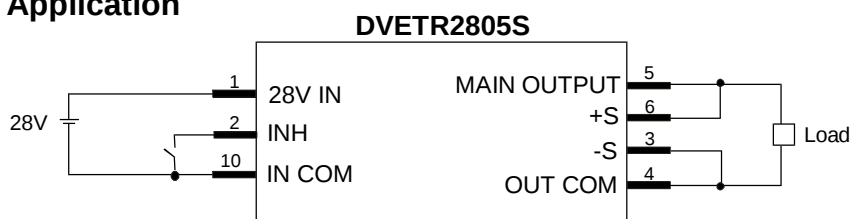
### Electrical Performance at 25°C

| Parameter                  | Conditions                           | DVETR283R3S |      |          | DVETR2805S |      |          | DVETR285R2S |      |          | DVETR2812S |       |          | DVETR2815S |       |          | Units |
|----------------------------|--------------------------------------|-------------|------|----------|------------|------|----------|-------------|------|----------|------------|-------|----------|------------|-------|----------|-------|
|                            |                                      | Min         | Typ  | Max      | Min        | Typ  | Max      | Min         | Typ  | Max      | Min        | Typ   | Max      | Min        | Typ   | Max      |       |
| Input Voltage              | Continuous<br>Transient <sup>1</sup> | 15          | 28   | 50<br>80 | 15         | 28   | 50<br>80 | 15          | 28   | 50<br>80 | 15         | 28    | 50<br>80 | 15         | 28    | 50<br>80 | Vdc   |
| Output Voltage             | Full Load                            | 3.25        | 3.30 | 3.35     | 4.95       | 5.00 | 5.05     | 5.14        | 5.20 | 5.26     | 11.88      | 12.00 | 12.12    | 14.85      | 15.00 | 15.15    | Vdc   |
| Output Power               | Vin: 15-50V                          | 0           |      | 20       | 0          |      | 30       | 0           |      | 30       | 0          |       | 30       | 0          |       | 30       | W     |
| Efficiency                 | Vin: 28V, Full Load                  | 68          | 72   |          | 73         | 77   |          | 73          | 77   |          | 78         | 82    |          | 79         | 83    |          | %     |
| Output Ripple <sup>2</sup> | Vin: 28V, Full Load                  |             | 30   | 60       |            | 40   | 80       |             | 40   | 80       |            | 60    | 120      |            | 75    | 150      | mVpp  |
| Load Regulation            | No Load to Full                      |             | 10   | 20       |            | 10   | 20       |             | 10   | 20       |            | 10    |          |            | 10    | 20       | mV    |
| Line Regulation            | Vin: 15 to 50V                       |             | 10   | 20       |            | 10   | 20       |             | 10   | 20       |            | 10    | 20       |            | 10    | 20       | mV    |

1. Transient time up to 1 second. 2. Bandwidth is limited to 10MHz.



### Typical Application



| Pin# | Description |
|------|-------------|
| 1    | 28V IN      |
| 2    | INH         |
| 3    | -S          |
| 4    | OUT COM     |
| 5    | MAIN OUTPUT |
| 6    | +S          |
| 7    | CASE        |
| 8    | N/C         |
| 9    | N/C         |
| 10   | IN COM      |