

## DMV78xx-500 SERIES, NON-ISOLATED, 3 PIN, SWITCHING REGULATORS

### FEATURES:

- ✓ Wide input voltage range
- ✓ High efficiency up to 96%
- ✓ Miniature SIP package
- ✓ Low ripple & noise
- ✓ Operating temperature range -40°C to +85°C
- ✓ year warranty



| Model        | Input voltage (Vdc) | Output voltage (Vdc) | Output current (mA) | Efficiency Typ. |
|--------------|---------------------|----------------------|---------------------|-----------------|
| DMV781V5-500 | 4.75-28             | 1.5                  | 500                 | 66%             |
| DMV781V8-500 | 4.75-28             | 1.8                  | 500                 | 68%             |
| DMV782V5-500 | 4.75-28             | 2.5                  | 500                 | 75%             |
| DMV7803-500  | 4.75-28             | 3.3                  | 500                 | 80%             |
| DMV7805-500  | 6.5-32              | 5                    | 500                 | 84%             |
| DMV7809-500  | 11-32               | 9                    | 500                 | 91%             |
| DMV7812-500  | 15-32               | 12                   | 500                 | 92%             |
| DMV7815-500  | 18-32               | 15                   | 500                 | 92%             |

Notes: other input and output models may available on request.

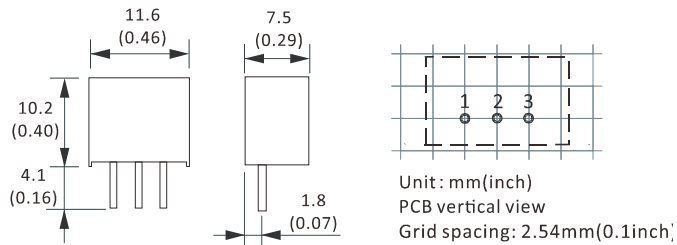
### ELECTRICAL

|                             |                                  |                 |
|-----------------------------|----------------------------------|-----------------|
| Output voltage accuracy     | Full load                        | ±2.0% typ.      |
| Line regulation             | Nominal Load, full voltage       | ±0.4% typ.      |
| Load regulation             | 20% ~ 100% full load             | ±0.2% typ.      |
| Ripple and noise            | 20MHz BM, full load              | ≤50mVp-p typ.   |
| Operating frequency         | Typical value                    | 350KHz typ.     |
| Operating temperature range | ---                              | -40°C to +85°C  |
| Storage temperature range   | Humidity: 5%-95%, non-condensing | -55°C to +120°C |
| Over temperature protection | ---                              | 150°C typ.      |
| Short circuit protection    | ---                              | Auto-recovery   |
| Relative humidity           | ---                              | 10% - 90%       |
| MTBF                        | Bellcore TR-332, 25°C            | 2000KHrs        |
| Weight                      | ---                              | 1.3g            |

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

## DMV78xx-500 SERIES, NON-ISOLATED, 3 PIN, SWITCHING REGULATORS

### MECHANICAL



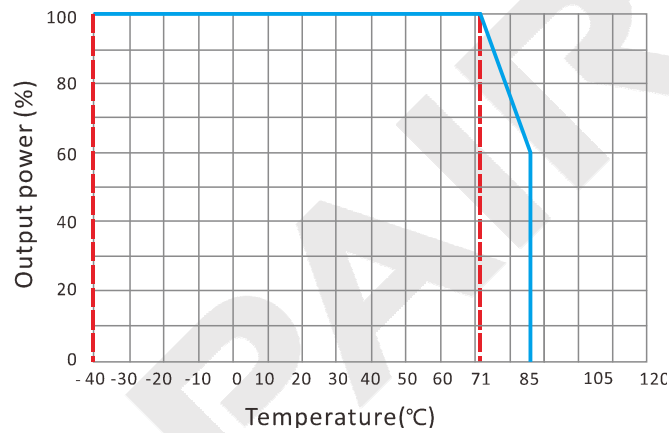
### CONNECTION

| PIN # | SINGLE |
|-------|--------|
| 1     | +Vin   |
| 2     | GND    |
| 3     | +Vo    |

Note:

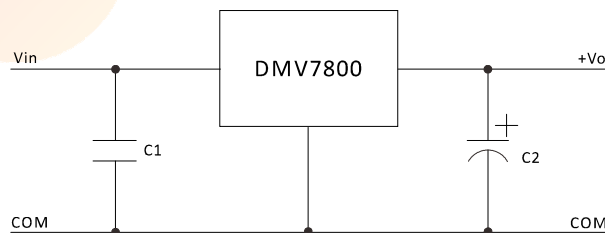
\* Unit is mm(inch).

### ELECTRICAL CURVE



### NOTES

#### RECOMMENDED TEST AND APPLICATION CIRCUIT



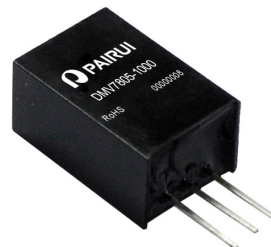
C1=Optional 1uF ceramic

C2=Required 100uF electrolytic

## DMV78xx-1000 SERIES, NON-ISOLATED, 3 PIN, SWITCHING REGULATORS

### FEATURES:

- ✓ Wide input voltage range
- ✓ High efficiency up to 97%
- ✓ Miniature SIP package
- ✓ Low ripple & noise
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



| Model         | Input voltage (Vdc) | Output voltage (Vdc) | Output current (mA) | Efficiency Typ. |
|---------------|---------------------|----------------------|---------------------|-----------------|
| DMV781V5-1000 | 4.75-26             | 1.5                  | 1000                | 80%             |
| DMV781V8-1000 | 4.75-26             | 1.8                  | 1000                | 82%             |
| DMV782V5-1000 | 4.75-28             | 2.5                  | 1000                | 88%             |
| DMV7803-1000  | 4.75-28             | 3.3                  | 1000                | 90%             |
| DMV7805-1000  | 6.5-32              | 5                    | 1000                | 93%             |
| DMV7806-1000  | 9-32                | 6.5                  | 1000                | 94%             |
| DMV7809-1000  | 12-32               | 9                    | 1000                | 95%             |
| DMV7812-1000  | 16-32               | 12                   | 1000                | 96%             |
| DMV7815-1000  | 20-32               | 15                   | 1000                | 97%             |

Notes: other input and output models may available on request.

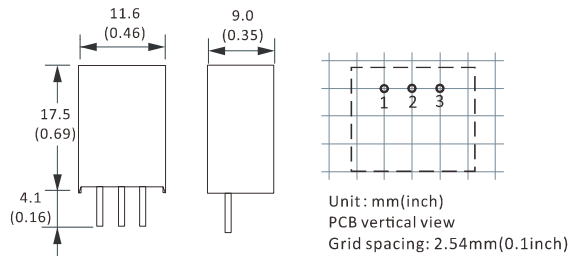
### ELECTRICAL

|                             |                                  |                 |
|-----------------------------|----------------------------------|-----------------|
| Output voltage accuracy     | Full load                        | ±2.0% typ.      |
| Line regulation             | Nominal Load, full voltage       | ±0.5% typ.      |
| Load regulation             | 20% ~ 100% full load             | ±0.5% typ.      |
| Ripple and noise            | 20MHz BM, full load              | ≤75mVp-p typ.   |
| Operating frequency         | Typical value                    | 330KHz typ.     |
| Operating temperature range | ---                              | -40°C to +85°C  |
| Storage temperature range   | Humidity: 5%-95%, non-condensing | -55°C to +120°C |
| Over temperature protection | ---                              | 150°C typ.      |
| Short circuit protection    | ---                              | Auto-recovery   |
| Relative humidity           | ---                              | 10% - 90%       |
| MTBF                        | Bellcore TR-332, 25°C            | 1000K Hrs       |
| Weight                      | ---                              | 3.86g           |

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

## DMV78xx-1000 SERIES, NON-ISOLATED, 3 PIN, SWITCHING REGULATORS

### MECHANICAL



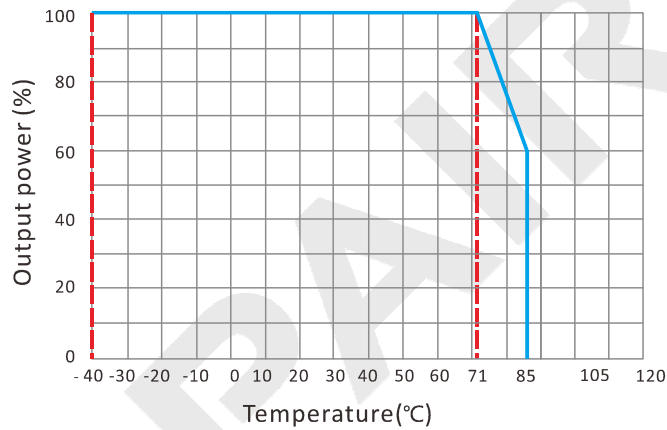
### CONNECTION

| PIN # | SINGLE |
|-------|--------|
| 1     | +Vin   |
| 2     | GND    |
| 3     | +Vo    |

Note:

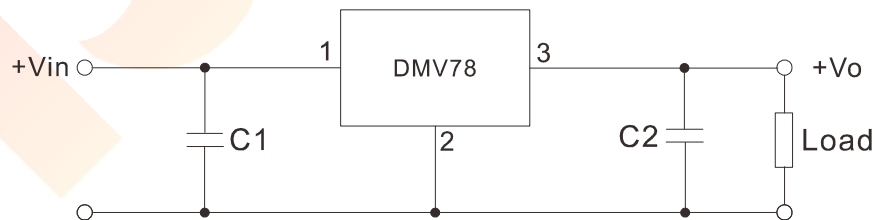
\* Unit is mm(inch).

### ELECTRICAL CURVE



### NOTES

#### RECOMMENDED TEST AND APPLICATION CIRCUIT



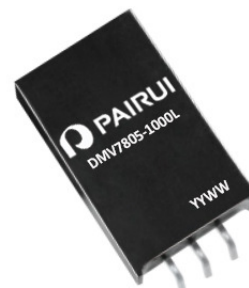
C1: Ceramic capacitor, 10uF

C2: Ceramic capacitor, 22uF

## DMV78xx-1000L SERIES, NON-ISOLATED, 3 PIN, SWITCHING REGULATORS

### FEATURES:

- ✓ Wide input voltage range
- ✓ High efficiency up to 97%
- ✓ Miniature SIP package
- ✓ Low ripple & noise
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



| Model          | Input voltage (Vdc) | Output voltage (Vdc) | Output current (mA) | Efficiency Typ. |
|----------------|---------------------|----------------------|---------------------|-----------------|
| DMV781V5-1000L | 4.75-26             | 1.5                  | 1000                | 80%             |
| DMV781V8-1000L | 4.75-26             | 1.8                  | 1000                | 82%             |
| DMV782V5-1000L | 4.75-28             | 2.5                  | 1000                | 88%             |
| DMV7803-1000L  | 4.75-28             | 3.3                  | 1000                | 90%             |
| DMV7805-1000L  | 6.5-32              | 5                    | 1000                | 93%             |
| DMV7806-1000L  | 9-32                | 6.5                  | 1000                | 94%             |
| DMV7809-1000L  | 12-32               | 9                    | 1000                | 95%             |
| DMV7812-1000L  | 15-32               | 12                   | 1000                | 95%             |
| DMV7815-1000L  | 20-32               | 15                   | 1000                | 97%             |

Notes: other input and output models may available on request.

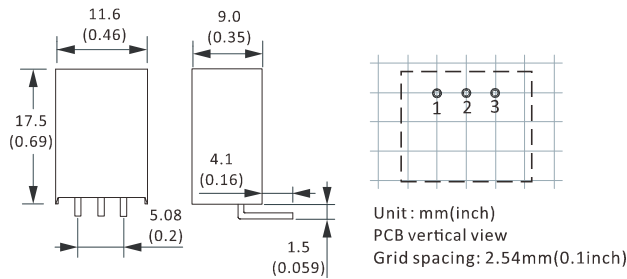
### ELECTRICAL

|                             |                                  |                 |
|-----------------------------|----------------------------------|-----------------|
| Output voltage accuracy     | Full load                        | ±2.0% typ.      |
| Line regulation             | Nominal Load, full voltage       | ±0.5% typ.      |
| Load regulation             | 20% ~ 100% full load             | ±0.5% typ.      |
| Ripple and noise            | 20MHz BM, full load              | ≤75mVp-p typ.   |
| Operating frequency         | Typical value                    | 330KHz typ.     |
| Operating temperature range | ---                              | -40°C to +85°C  |
| Storage temperature range   | Humidity: 5%-95%, non-condensing | -55°C to +120°C |
| Over temperature protection | ---                              | 150°C typ.      |
| Short circuit protection    | ---                              | Auto-recovery   |
| Relative humidity           | ---                              | 10% - 90%       |
| MTBF                        | Bellcore TR-332, 25°C            | 1000K Hrs       |
| Weight                      | ---                              | 3.8g            |

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

DMV78xx-1000L SERIES, NON-ISOLATED, 3 PIN, SWITCHING REGULATORS

MECHANICAL



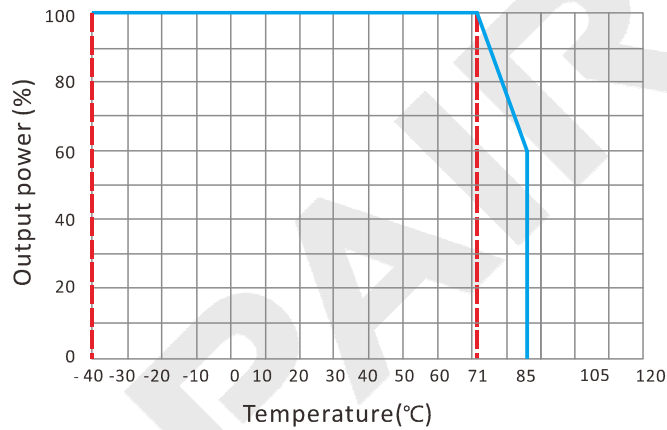
CONNECTION

| PIN # | SINGLE |
|-------|--------|
| 1     | +Vin   |
| 2     | GND    |
| 3     | +Vo    |

Note:

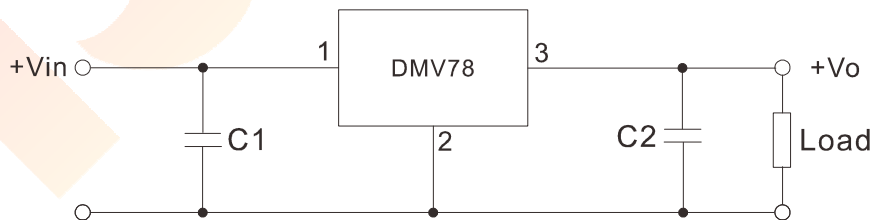
\* Unit is mm(inch).

ELECTRICAL CURVE



NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT



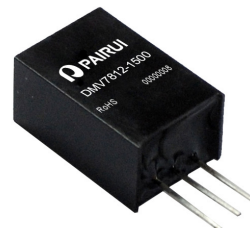
C1: Ceramic capacitor, 10uF

C2: Ceramic capacitor, 22uF

## DMV78xx-1500 SERIES, NON-ISOLATED, 3 PIN, SWITCHING REGULATORS

### FEATURES:

- ✓ Wide input voltage range
- ✓ High efficiency up to 94%
- ✓ Miniature SIP package
- ✓ Low ripple & noise
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



| Model         | Input voltage (Vdc) | Output voltage (Vdc) | Output current (mA) | Efficiency Max. |
|---------------|---------------------|----------------------|---------------------|-----------------|
| DMV781V5-1500 | 4.75-18             | 1.5                  | 1500                | 82%             |
| DMV781V8-1500 | 4.75-18             | 1.8                  | 1500                | 84%             |
| DMV782V5-1500 | 4.75-18             | 2.5                  | 1500                | 88%             |
| DMV7803-1500  | 4.75-18             | 3.3                  | 1500                | 90%             |
| DMV7805-1500  | 6.5-18              | 5                    | 1500                | 93%             |
| DMV786V5-1500 | 8-18                | 6.5                  | 1500                | 94%             |

Notes: other input and output models may available on request.

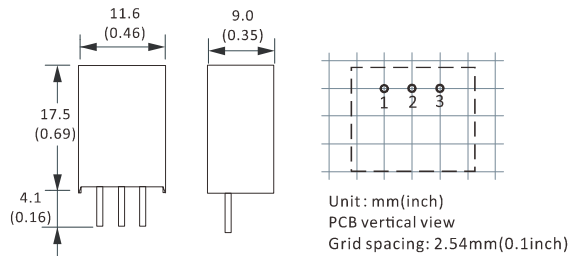
### ELECTRICAL

|                             |                                  |                           |
|-----------------------------|----------------------------------|---------------------------|
| Output voltage accuracy     | Full load                        | ±2.0% typ.                |
| Line regulation             | Nominal Load, full voltage       | ±0.5% typ.                |
| Load regulation             | 20% ~ 100% full load             | ±0.5% typ.                |
| Ripple and noise            | 20MHz BM, full load              | ≤75mVp-p typ.             |
| Operating frequency         | Typical value                    | 330KHz typ.               |
| Operating temperature range | ---                              | -40°C to +85°C            |
| Storage temperature range   | Humidity: 5%-95%, non-condensing | -55°C to +125°C           |
| Over temperature protection | ---                              | 150°C typ.                |
| Short circuit protection    | ---                              | Continuous, Auto-recovery |
| Relative humidity           | ---                              | 10% - 90%                 |
| MTBF                        | Bellcore TR-332, 25°C            | 1000K Hrs                 |
| Weight                      | ---                              | 3.86g                     |

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

**DMV78xx-1500 SERIES, NON-ISOLATED, 3 PIN, SWITCHING REGULATORS**

**MECHANICAL**



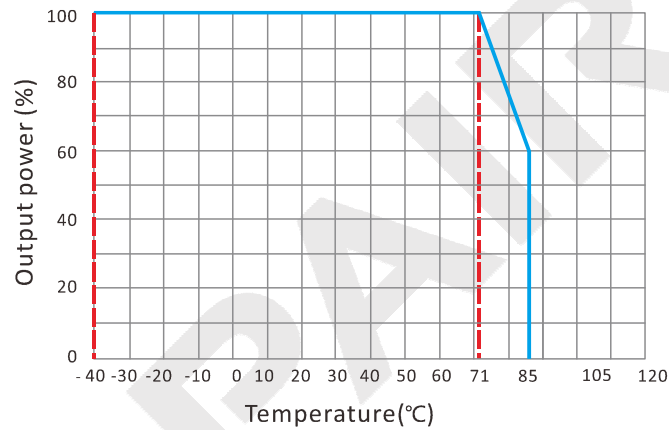
**CONNECTION**

| PIN # | SINGLE |
|-------|--------|
| 1     | +Vin   |
| 2     | GND    |
| 3     | +Vo    |

Note:

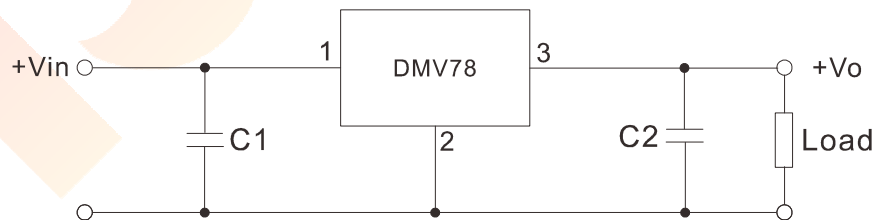
\* Unit is mm(inch).

**ELECTRICAL CURVE**



**NOTES**

**RECOMMENDED TEST AND APPLICATION CIRCUIT**



C1: Ceramic capacitor, 10uF

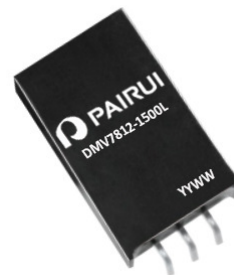
C2: Ceramic capacitor, 22uF



## DMV78xx-1500L SERIES, NON-ISOLATED, 3 PIN, SWITCHING REGULATORS

### FEATURES:

- ✓ Wide input voltage range
- ✓ High efficiency up to 94%
- ✓ Miniature SIP package
- ✓ Low ripple & noise
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



| Model          | Input voltage (Vdc) | Output voltage (Vdc) | Output current (mA) | Efficiency Max. |
|----------------|---------------------|----------------------|---------------------|-----------------|
| DMV781V5-1500L | 4.75-18             | 1.5                  | 1500                | 82%             |
| DMV781V8-1500L | 4.75-18             | 1.8                  | 1500                | 84%             |
| DMV782V5-1500L | 4.75-18             | 2.5                  | 1500                | 88%             |
| DMV7803-1500L  | 4.75-18             | 3.3                  | 1500                | 90%             |
| DMV7805-1500L  | 6.5-18              | 5                    | 1500                | 93%             |
| DMV786V5-1500L | 8-18                | 6.5                  | 1500                | 94%             |

Notes: other input and output models may available on request.

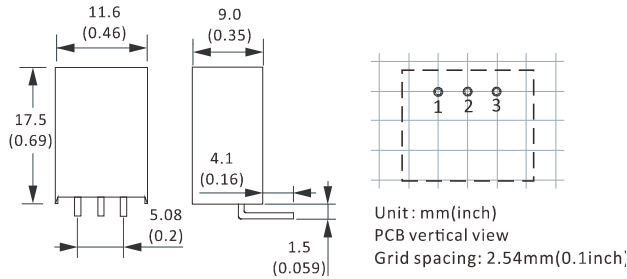
### ELECTRICAL

|                             |                                  |                           |
|-----------------------------|----------------------------------|---------------------------|
| Output voltage accuracy     | Full load                        | ±2.0% typ.                |
| Line regulation             | Nominal Load, full voltage       | ±0.5% typ.                |
| Load regulation             | 20% ~ 100% full load             | ±0.5% typ.                |
| Ripple and noise            | 20MHz BM, full load              | ≤75mVp-p typ.             |
| Operating frequency         | Typical value                    | 330KHz typ.               |
| Operating temperature range | ---                              | -40°C to +85°C            |
| Storage temperature range   | Humidity: 5%-95%, non-condensing | -55°C to +125°C           |
| Over temperature protection | ---                              | 150°C typ.                |
| Short circuit protection    | ---                              | Continuous, Auto-recovery |
| Relative humidity           | ---                              | 10% - 90%                 |
| MTBF                        | Bellcore TR-332, 25°C            | 1000K Hrs                 |
| Weight                      | ---                              | 3.86g                     |

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

DMV78xx-1500L SERIES, NON-ISOLATED, 3 PIN, SWITCHING REGULATORS

MECHANICAL



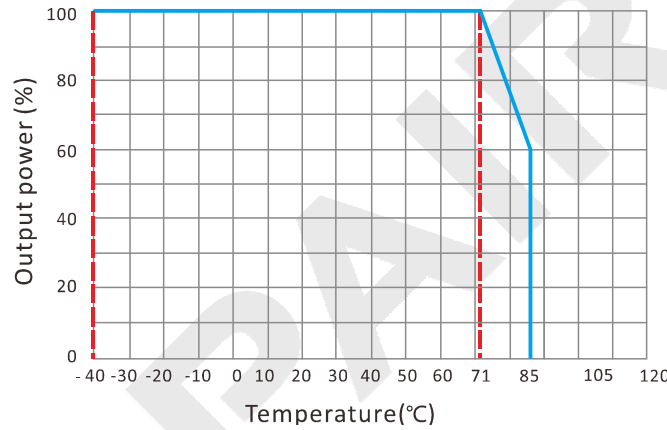
CONNECTION

| PIN # | SINGLE |
|-------|--------|
| 1     | +Vin   |
| 2     | GND    |
| 3     | +Vo    |

Note:

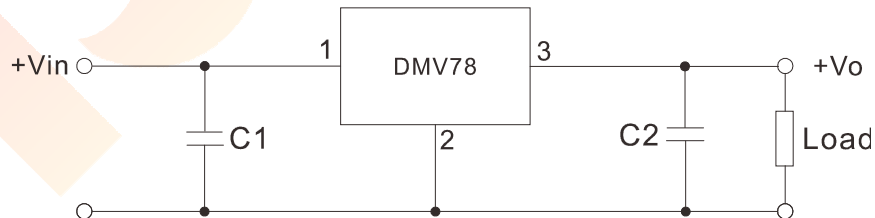
\* Unit is mm(inch).

ELECTRICAL CURVE



NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT



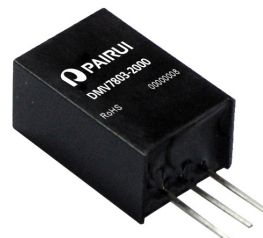
C1: Ceramic capacitor, 10uF

C2: Ceramic capacitor, 22uF

## DMV78xx-2000 SERIES, NON-ISOLATED, 3 PIN, SWITCHING REGULATORS

### FEATURES:

- ✓ Wide input voltage range
- ✓ High efficiency up to 92%
- ✓ Miniature SIP package
- ✓ Low ripple & noise
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



| Model         | Input voltage (Vdc) | Output voltage (Vdc) | Output current (mA) | Efficiency Typ. |
|---------------|---------------------|----------------------|---------------------|-----------------|
| DMV781V5-2000 | 4.75-18             | 1.5                  | 2000                | 79%             |
| DMV781V8-2000 | 4.75-18             | 1.8                  | 2000                | 81%             |
| DMV782V5-2000 | 4.75-18             | 2.5                  | 2000                | 86%             |
| DMV7803-2000  | 4.75-18             | 3.3                  | 2000                | 87%             |
| DMV7805-2000  | 7-18                | 5                    | 2000                | 91%             |
| DMV7806-2000  | 8.5-18              | 6.5                  | 2000                | 92%             |

Notes: other input and output models may available on request.

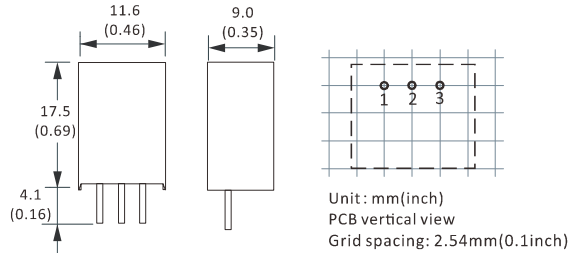
### ELECTRICAL

|                             |                                  |                 |
|-----------------------------|----------------------------------|-----------------|
| Output voltage accuracy     | Full load                        | ±2.0% typ.      |
| Line regulation             | Nominal Load, full voltage       | ±0.5% typ.      |
| Load regulation             | 20% ~ 100% full load             | ±0.5% typ.      |
| Ripple and noise            | 20MHz BM, full load              | ≤75mVp-p typ.   |
| Operating frequency         | Typical value                    | 330KHz typ.     |
| Operating temperature range | ---                              | -40°C to +85°C  |
| Storage temperature range   | Humidity: 5%-95%, non-condensing | -55°C to +120°C |
| Over temperature protection | ---                              | 150°C typ.      |
| Short circuit protection    | ---                              | Auto-recovery   |
| Relative humidity           | ---                              | 10% - 90%       |
| MTBF                        | Bellcore TR-332, 25°C            | 1000K Hrs       |
| Weight                      | ---                              | 3.8g            |

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

DMV78xx-2000 SERIES, NON-ISOLATED, 3 PIN, SWITCHING REGULATORS

MECHANICAL



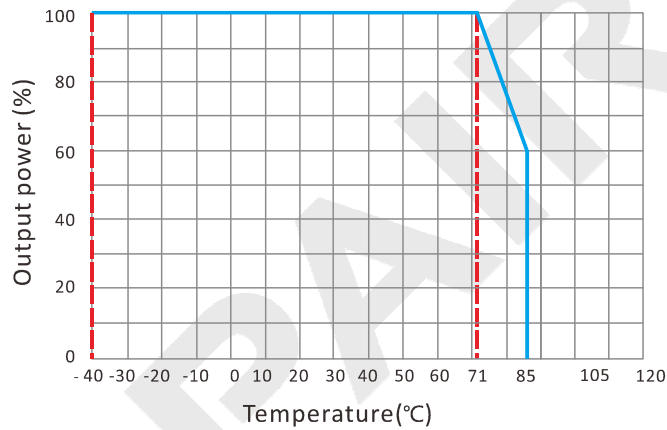
CONNECTION

| PIN # | SINGLE |
|-------|--------|
| 1     | +Vin   |
| 2     | GND    |
| 3     | +Vo    |

Note:

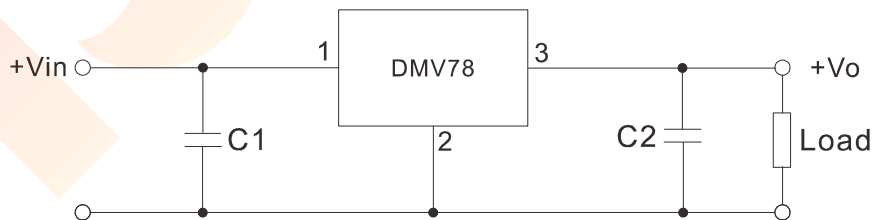
\* Unit is mm(inch).

ELECTRICAL CURVE



NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT



C1: Ceramic capacitor, 10uF

C2: Ceramic capacitor, 22uF

## DMV78xx-2000L SERIES, NON-ISOLATED, 3 PIN, SWITCHING REGULATORS

### FEATURES:

- ✓ Wide input voltage range
- ✓ High efficiency up to 92%
- ✓ Miniature SIP package
- ✓ Low ripple & noise
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



| Model          | Input voltage (Vdc) | Output voltage (Vdc) | Output current (mA) | Efficiency Typ. |
|----------------|---------------------|----------------------|---------------------|-----------------|
| DMV781V5-2000L | 4.75-18             | 1.5                  | 2000                | 79%             |
| DMV781V8-2000L | 4.75-18             | 1.8                  | 2000                | 81%             |
| DMV782V5-2000L | 4.75-18             | 2.5                  | 2000                | 86%             |
| DMV7803-2000L  | 4.75-18             | 3.3                  | 2000                | 87%             |
| DMV7805-2000L  | 7-18                | 5                    | 2000                | 91%             |
| DMV7806-2000L  | 8.5-18              | 6.5                  | 2000                | 92%             |

Notes: other input and output models may available on request.

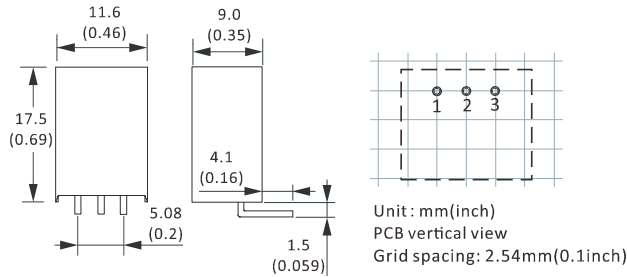
### ELECTRICAL

|                             |                                  |                 |
|-----------------------------|----------------------------------|-----------------|
| Output voltage accuracy     | Full load                        | ±2.0% typ.      |
| Line regulation             | Nominal Load, full voltage       | ±0.5% typ.      |
| Load regulation             | 20% ~ 100% full load             | ±0.5% typ.      |
| Ripple and noise            | 20MHz BM, full load              | ≤75mVp-p typ.   |
| Operating frequency         | Typical value                    | 330KHz typ.     |
| Operating temperature range | ---                              | -40°C to +85°C  |
| Storage temperature range   | Humidity: 5%-95%, non-condensing | -55°C to +120°C |
| Over temperature protection | ---                              | 150°C typ.      |
| Short circuit protection    | ---                              | Auto-recovery   |
| Relative humidity           | ---                              | 10% - 90%       |
| MTBF                        | Bellcore TR-332, 25°C            | 1000K Hrs       |
| Weight                      | ---                              | 3.8g            |

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

DMV78xx-2000L SERIES, NON-ISOLATED, 3 PIN, SWITCHING REGULATORS

MECHANICAL



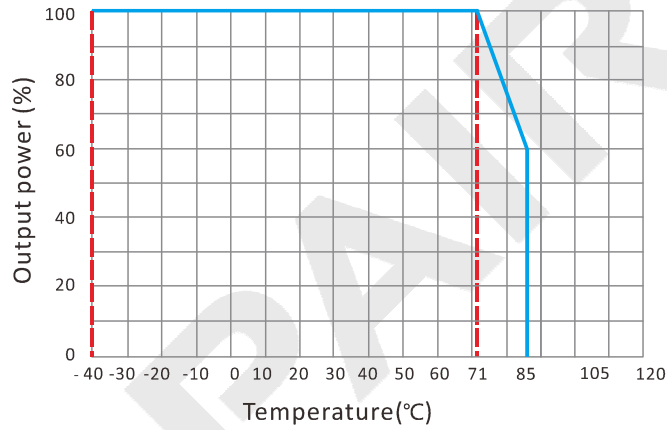
CONNECTION

| PIN # | SINGLE |
|-------|--------|
| 1     | +Vin   |
| 2     | GND    |
| 3     | +Vo    |

Note:

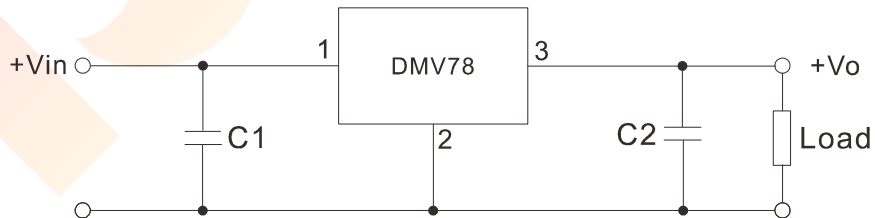
\* Unit is mm(inch).

ELECTRICAL CURVE



NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT



C1: Ceramic capacitor, 10uF

C2: Ceramic capacitor, 22uF