

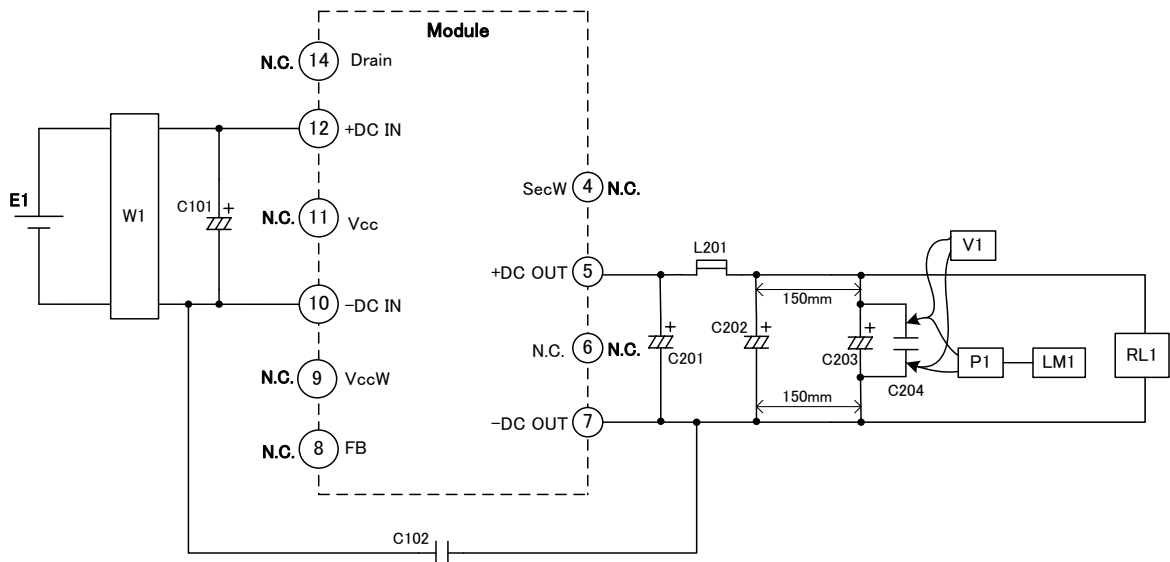
■ Input-output condition

| Item                 | Specification  |
|----------------------|----------------|
| Input voltage range  | DC110~450V     |
| Rated input voltage  | DC140V, DC340V |
| Rated output voltage | 3.3V           |
| Rated load current   | 1A             |

■ Electrical specification Ta=25°C

| Item                     | Specification      | Conditions · Note                           |
|--------------------------|--------------------|---|
| Efficiency               | More than 70%      | Rated input voltage<br>Rated output current |
| Output voltage tolerance | ±5%                |   |
| Line regulation          | Less than 50mV     | Input voltage DC110V~450V                   |
| Load regulation          | Less than 100mV    | Output current 0~1A                         |
| No-load power            | Less than 80mW     | Rated input voltage                         |
| Ripple                   | Less than 60mVp-p  | Rated input voltage<br>Rated output current |
| Ripple noise             | Less than 100mVp-p |   |

Measurement circuit



- E1 : DC power supply
- W1 : Wattmeter WT210 (YOKOGAWA)
- RL1 : Electronic load
- V1 : Voltmeter Class 0.5
- P1 : Differential probe DP-100 (KG)
- LM1 : Ripple noise meter RM-103 (KG)

- C101 : 450BXC22M (RUBYCON)
- C102 : CD75-E2GA681M (TDK)
- C201 : 10ZLG680M (RUBYCON)
- C202 : 10ZLG680M (RUBYCON)
- C203 : 25ZLG47M (RUBYCON)
- C204 : 50F2D104K (RUBYCON)
- L201 : PJ5H-2R2M (KORIN)

■Protection

| Item                   | Specification   | Conditions · Note |
|------------------------|-----------------|-------------------|
| Overcurrent protection | More than 1.05A | Auto recovery     |
| Overvoltage protection | 3.5~6.0V        | Latch off         |
| Overheat protection    |                 | Latch off         |

■Insulation

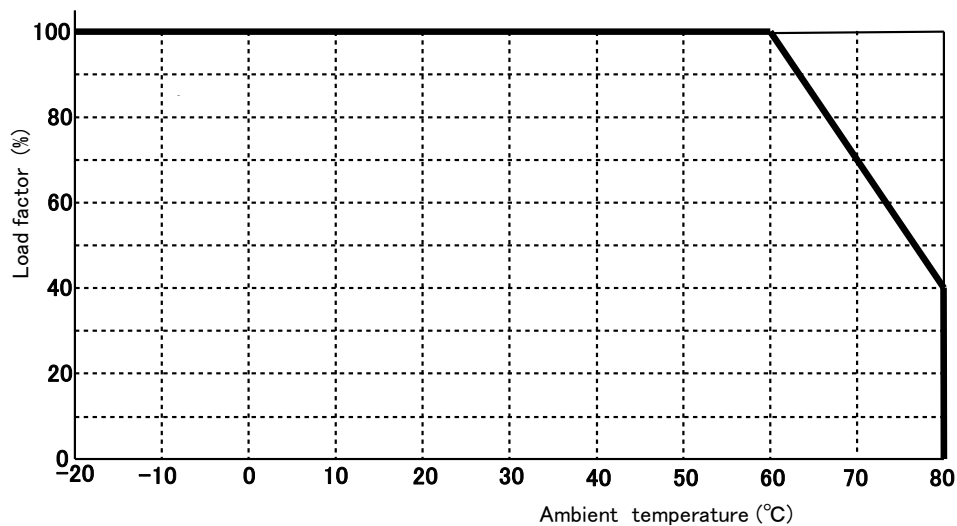
| Item                                       | Specification    | Conditions · Note                  |
|--|------------------|------------------------------------|
| Insulation voltage<br>(Between Pri-Sec)    | 3.0kV (or 3.6kV) | AC 1min (or AC 2sec)<br>Cutoff 2mA |
| Insulation resistance<br>(Between Pri-Sec) | More than 100MΩ  | DC500V                             |

■Environmental conditions

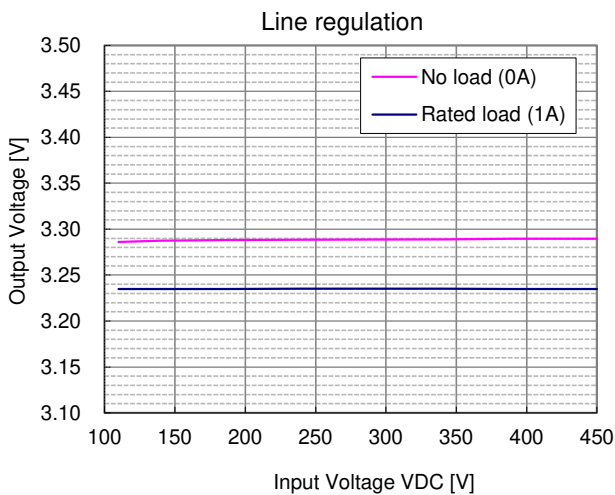
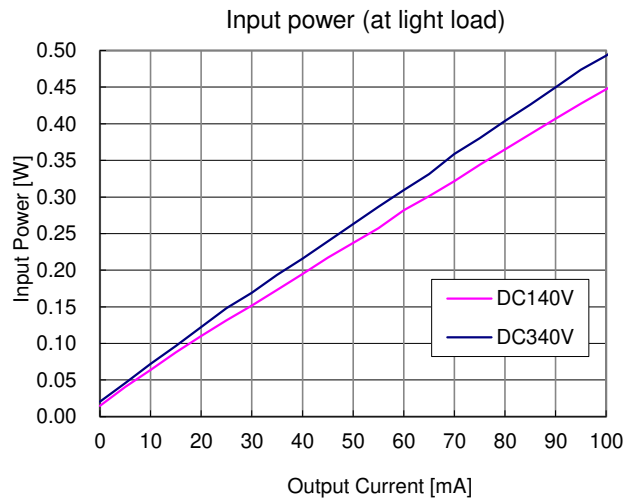
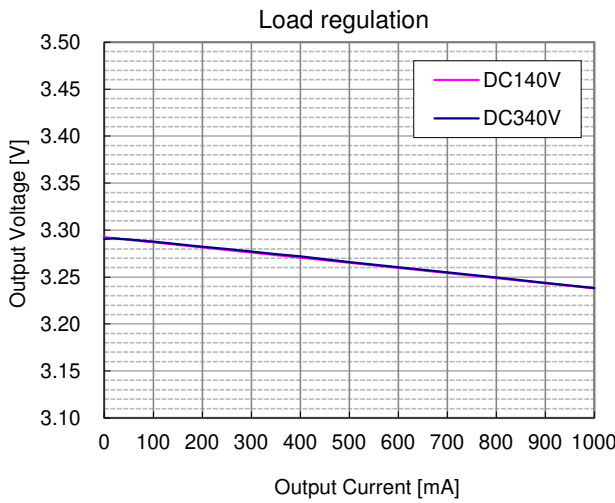
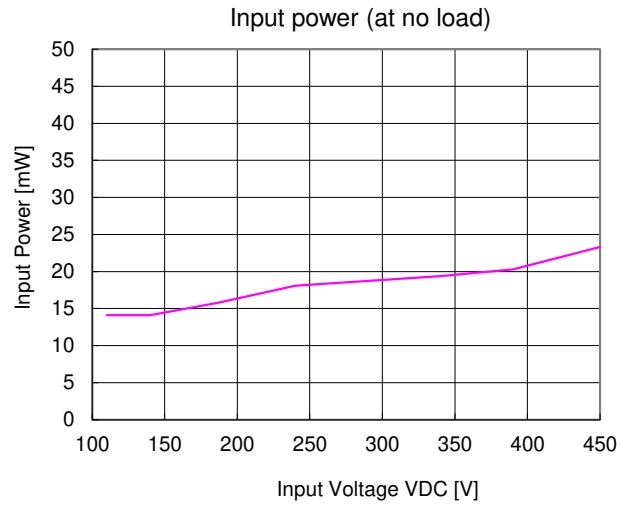
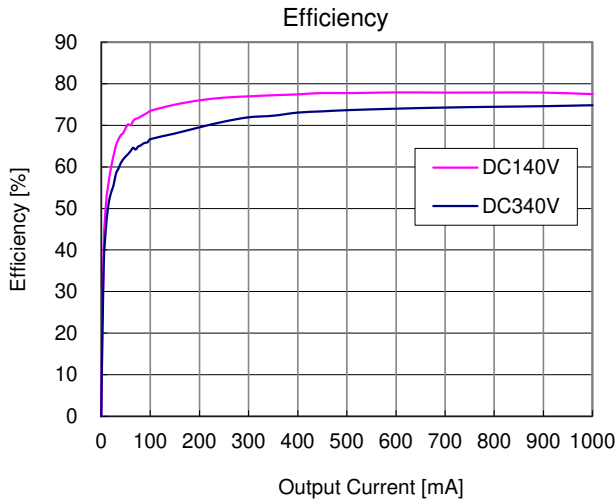
| Item                  | Specification                 | Conditions · Note                      |
|-----------------------|-------------------------------|--|
| Operation temperature | -20°C~80°C                    | Stand for ambient temperature derating |
| Operating humidity    | 20~95%RH<br>(No condensation) |  |
| Storage temperature   | -25°C~85°C                    |  |
| Storage humidit       | 5~95%RH<br>(No condensation)  |  |

■Ambient temperature derating curve

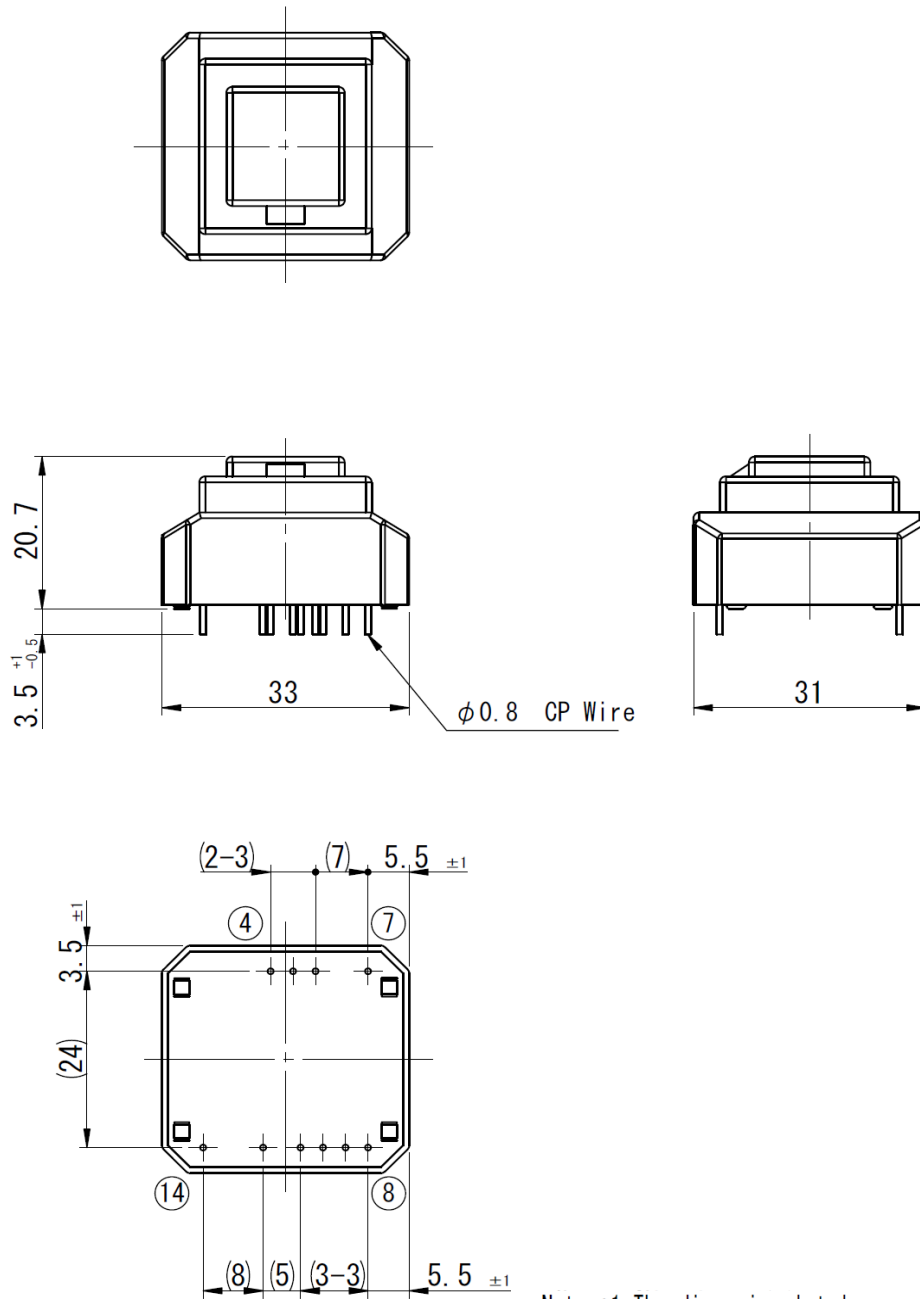
Reduce the load current according to the following temperature derating table.



■ Typical characteristics Ta=25°C



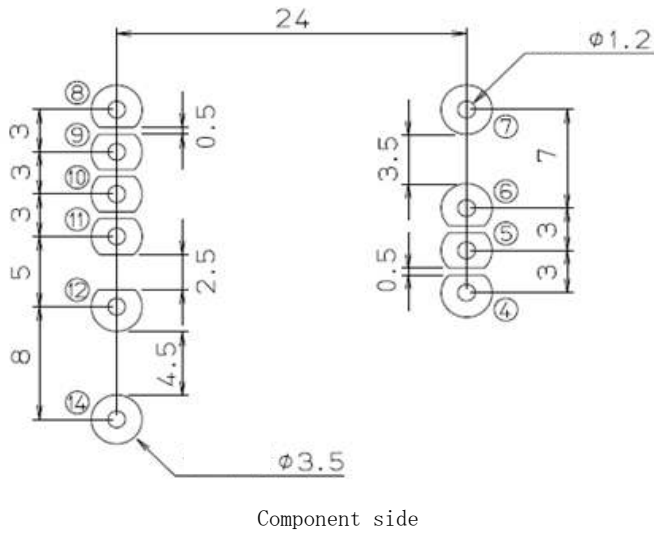
■Outline dimensional drawing



Note :1.The dimensional tolerance without directions is  $\pm 0.5$ mm.

Unit : mm

■Recommended hole diameter and land size



※ The round pulling out figure is a pin numbering.

Unit : mm

■Terminal function and connection

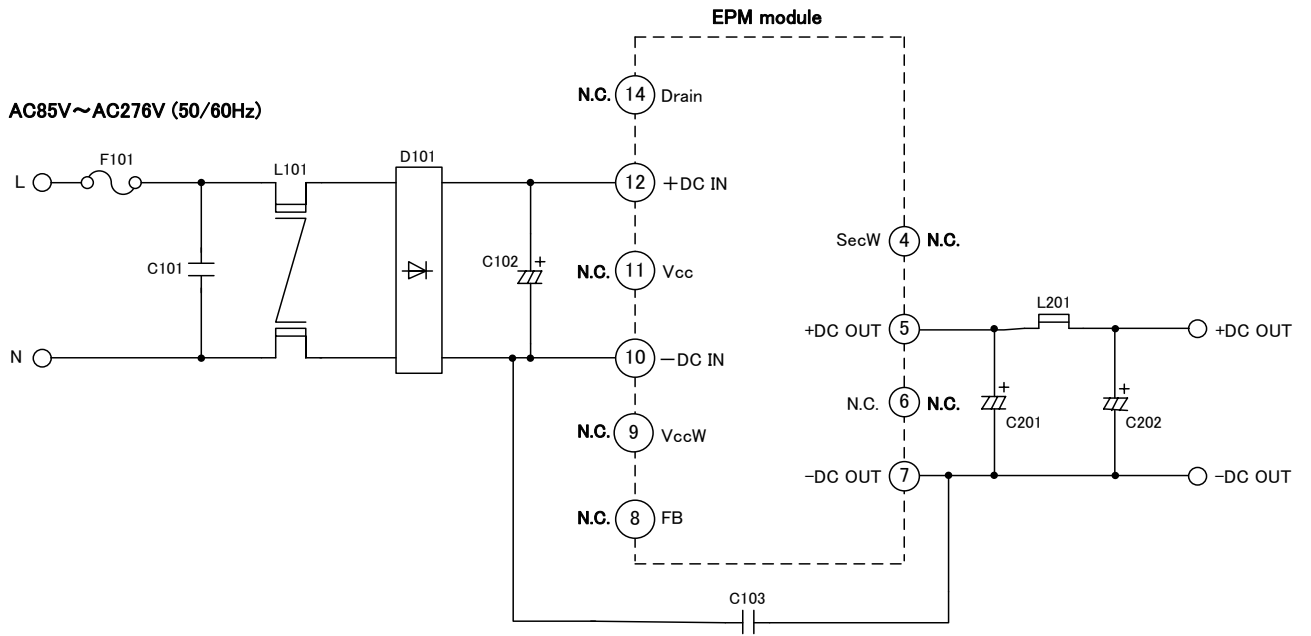
Secondaries

| Pin No. | Name    | Explanation of terminals                                 |
|---------|---------|--|
| 1       |         | No terminal  |
| 2       |         | No terminal  |
| 3       |         | No terminal  |
| 4       | SecW    | Non-contact terminal ※Don't connect with other circuits. |
| 5       | +DC OUT | Output terminal (+)                                      |
| 6       | N. C.   | Non-contact terminal ※Don't connect with other circuits. |
| 7       | -DC OUT | Output terminal (-)                                      |

Primaries

| Pin No. | Name   | Explanation of terminals                                 |
|---------|--------|--|
| 8       | FB     | Non-contact terminal ※Don't connect with other circuits. |
| 9       | VccW   | Non-contact terminal ※Don't connect with other circuits. |
| 10      | -DC IN | DC voltage input terminal (-)                            |
| 11      | Vcc    | Terminal for start-up time adjustment                    |
| 12      | +DC IN | DC voltage input terminal (+)                            |
| 13      |        | No terminal  |
| 14      | Drain  | Terminal for noise adjustment                            |

Application circuit example



| Symbol | Description | Part No.      | Manufacturer  |
|--------|-------------|---------------|---------------|
| D101   | Diode       | D1UBA80       | SHINDENGEN    |
| L101   | Inductor    | LU-8S-V223    | KORIN         |
| L201   | Inductor    | PJ5H-2R2M     | KORIN         |
| C101   | Capacitor   | LE104-MX      | OKAYA         |
| C102   | Capacitor   | 450BXC15M     | RUBYCON       |
| C103   | Capacitor   | CD75-E2GA681M | TDK           |
| C201   | Capacitor   | 10ZLG680M     | RUBYCON       |
| C202   | Capacitor   | 10ZLG680M     | RUBYCON       |
| F101   | Fuse        | FCT 250V 1.6A | NIPPON-SEISEN |