

UM0100 SERIES

1 Watt DC-DC Converters

- ◆ Low Profile Molding SMD Package
- ◆ Unregulated Output
- ◆ Very Low Component Height 7.3mm
- ◆ 1000 VDC Isolation Voltage
- ◆ Toroidal Magnetics
- ◆ Single Isolated Output
- ◆ 5V, 12V Input
- ◆ 5V, 9V, 12V and 15V Output
- ◆ Multi Layer Ceramic Capacitors



SPECIFICATIONS

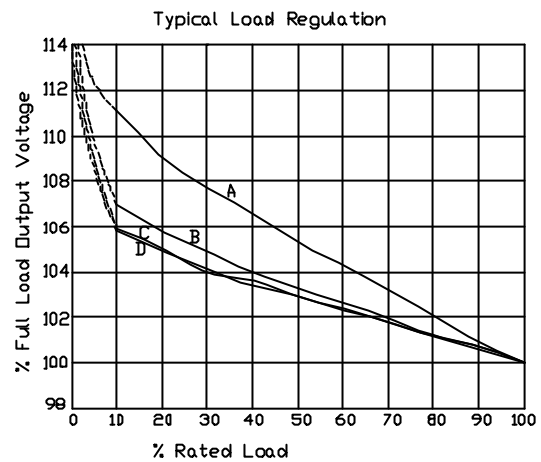
All specifications are typical at nominal line full load, and 25°C unless otherwise noted.

NOTES:

1. Load regulation is for load change from 10% to 100%. See graph of load regulation.

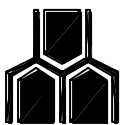
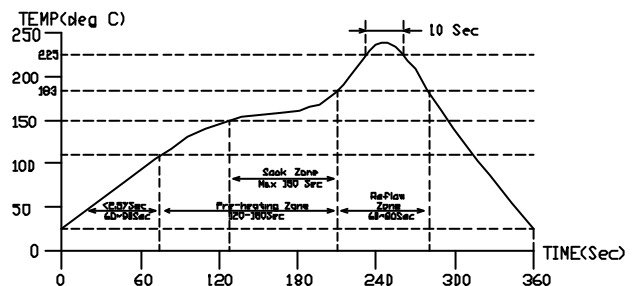
ELECTRICAL SPECIFICATION

| | |
|--|-----------------------------------|
| Input Voltage Range | ±10% |
| Input Filter | Capacitor |
| Output Voltage Accuracy | ±5% |
| Line Voltage Regulation | 1.2%/1% of Vin. typ. |
| Load Voltage Regulation ¹ | ±10% max. |
| 5V Output Type | 12% typ. 14% max. |
| Ripple and Noise(20MHz BW) | 100mV _{p-p} |
| Efficiency at Full Load | See Table |
| Isolation Voltage | 1000 VDC min. |
| Operating Frequency | 20 KHz min. |
| Short Circuit Protection | 1Sec. typ. |
| Operating Temperature Range | (-45 ^o)-25°C to +85°C |
| Storage Temperature Range | -55°C to +125°C |
| Dimensions | 12.70*8.10*7.30 mm |
| Package Material | Plastic Encapsulated |
| | UL 94V-0 |
| Weight | 1.5g |



A: UM0101 B: UM0107
 C: UM0102 D: UM0103

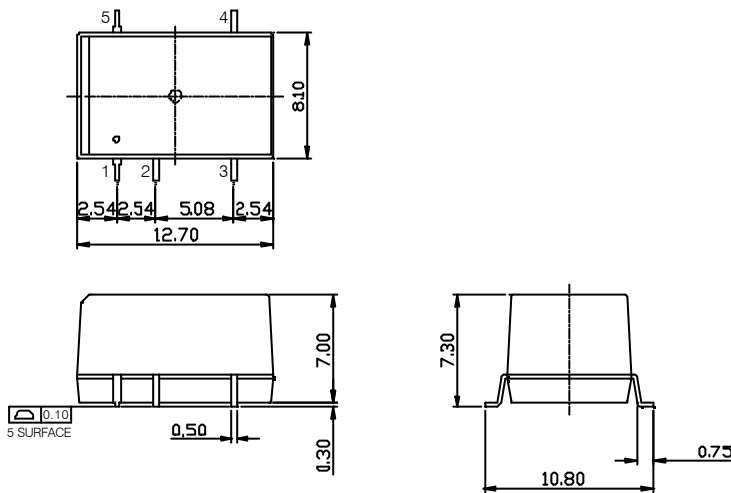
2. Start up delay(4-5s) at -45°C at low line(4.5...4.7V).
3. Recommended Reflow soldering



| MODEL NUMBER | INPUT VOLTAGE | OUTPUT VOLTAGE | OUTPUT CURRENT | % EFF | MAXIMUM ¹ CAPACITIVE LOAD(uF) |
|--------------|---------------|----------------|----------------|-------|--|
| UM0101 | 5 VDC | 5 VDC | 200 mA | 70 | 100 |
| UM0107 | | 9 VDC | 111 mA | 78 | 47 |
| UM0102 | | 12 VDC | 84 mA | 80 | 39 |
| UM0103 | | 15 VDC | 66 mA | 82 | 33 |
| UM0111 | 12 VDC | 5 VDC | 200 mA | 70 | 100 |

NOTE: 1. Maximum capacitive load across the output ports should not be over following indicated values.

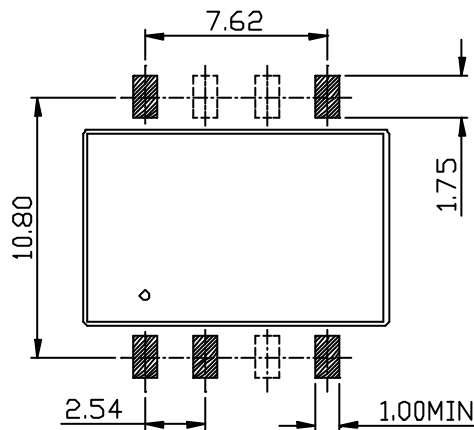
MECHANICAL SPECIFICATIONS



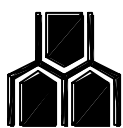
| Pin Connections | |
|-----------------|---------------|
| Pin | Single Output |
| 1 | -Vi |
| 2 | +Vi |
| 3 | -Vo |
| 4 | +Vo |
| 5 | NC* |

NC*: No connection

RECOMMENDED FOOTPRINT DETAILS



*All dimensions in mm.
 Tolerance .xx = ±0.25(mm)



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