

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

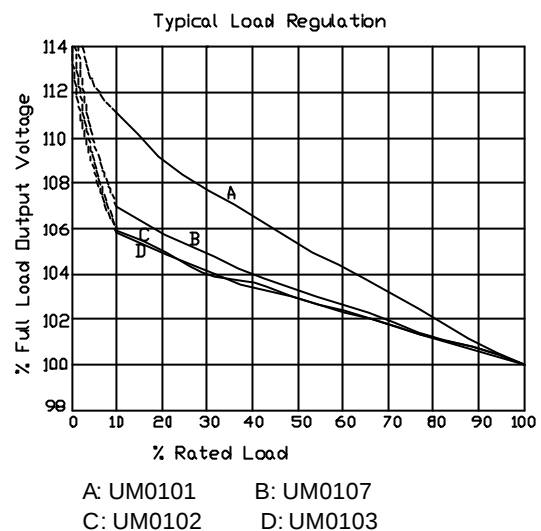
All specifications are typical at nominal line full load, and 25°C unless otherwise noted.

NOTES:

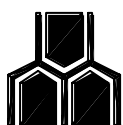
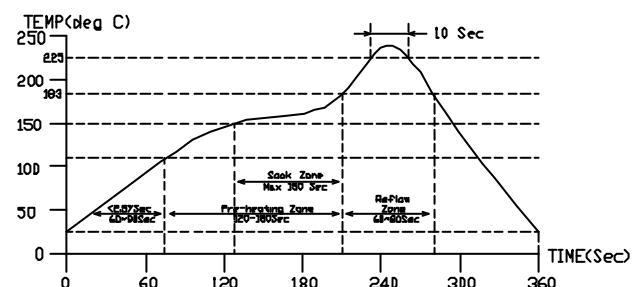
- Load regulation is for load change from 10% to 100%. See graph of load regulation.

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 ²)-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



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



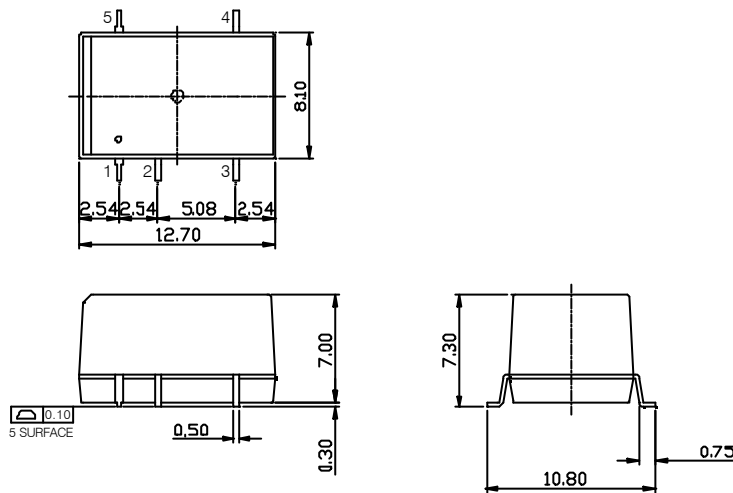
**UNIVERSAL
MICROELECTRONICS**

3,27TH RD., TAICHUNG INDUSTRIAL PARK,
TAICHUNG, TAIWAN, R.O.C.
TEL: 886-4-23590096 FAX: 886-4-23590129

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.

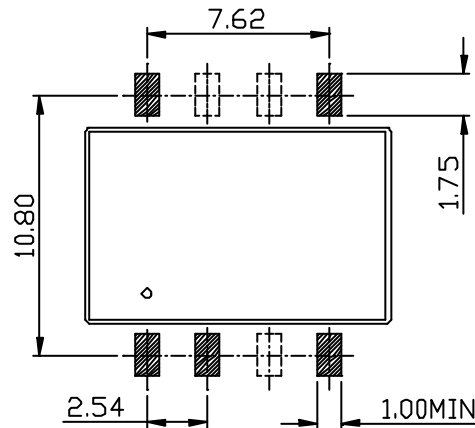
MECHANICAL SPECIFICATIONS



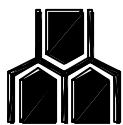
Pin Connections	
Pin	Single Output
1	-Vi
2	+Vi
3	-Vo
4	+Vo
5	NC*

NC*: No connection

RECOMMENDED FOOTPRINT DETAILS



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



**UNIVERSAL
MICROELECTRONICS**

3,27TH RD., TAICHUNG INDUSTRIAL PARK,
TAICHUNG, TAIWAN, R.O.C.
TEL: 886-4-23590096 FAX: 886-4-23590129