

**1 Watt****8 Pin****SMD-Package N  
LEADFREE**

- o Ultra-Miniature Size
- o Unregulated Output
- o 1000 VDC I/O-Isolation
- o 3000 VDC I/O-Isolation add Suffix "H3" (not valid for „P8“)
- o For 8 Pin SMD-Package add Suffix "P8"
- o EN60950 and EN60601 compliant

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	%EFF MIN.
1NUS3.3N3.3E LEADFREE	3.3 VDC	3.3 VDC	303 mA	75
1NUS3.3N5E LEADFREE		5 VDC	200 mA	72
1NUS3.3N9E LEADFREE		9 VDC	111 mA	74
1NUS3.3N12E LEADFREE		12 VDC	84 mA	75
1NUS3.3N15E LEADFREE		15 VDC	66 mA	74
1NUS5N3.3E LEADFREE	5 VDC	3.3 VDC	303 mA	75
1NUS5N5E LEADFREE		5 VDC	200 mA	72
1NUS5N9E LEADFREE		9 VDC	111 mA	74
1NUS5N12E LEADFREE		12 VDC	84 mA	75
1NUS5N15E LEADFREE		15 VDC	66 mA	74
1NUS9N3.3E LEADFREE	9 VDC	3.3 VDC	303 mA	75
1NUS9N5E LEADFREE		5 VDC	200 mA	72
1NUS9N9E LEADFREE		9 VDC	111 mA	74
1NUS9N12E LEADFREE		12 VDC	84 mA	75
1NUS9N15E LEADFREE		15 VDC	66 mA	74
1NUS12N3.3E LEADFREE	12 VDC	3.3 VDC	303 mA	75
1NUS12N5E LEADFREE		5 VDC	200 mA	72
1NUS12N9E LEADFREE		9 VDC	111 mA	74
1NUS12N12E LEADFREE		12 VDC	84 mA	75
1NUS12N15E LEADFREE		15 VDC	66 mA	74
1NUS15N3.3E LEADFREE	15 VDC	3.3 VDC	303 mA	75
1NUS15N5E LEADFREE		5 VDC	200 mA	72
1NUS15N9E LEADFREE		9 VDC	111 mA	74
1NUS15N12E LEADFREE		12 VDC	84 mA	75
1NUS15N15E LEADFREE		15 VDC	66 mA	74
1NUS24N3.3E LEADFREE	24 VDC	3.3 VDC	303 mA	75
1NUS24N5E LEADFREE		5 VDC	200 mA	72
1NUS24N9E LEADFREE		9 VDC	111 mA	74
1NUS24N12E LEADFREE		12 VDC	84 mA	75
1NUS24N15E LEADFREE		15 VDC	66 mA	74

NOTE: Taped on Reel (Suffix "R") on Request.

**SPECIFICATIONS**

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

**INPUT SPECIFICATIONS**

Input Voltage Range	±10 % max.
Input Filter	Capacitor

**OUTPUT SPECIFICATIONS**

Voltage set Accuracy	-1% typ. ±5% max.
Ripple and Noise, 20MHz BW	50 mV p-p typ. 100 mV p-p max.
Short Circuit Protection	1 sec. (optional continuous on request)
Line Regulation (Low Line to High Line @ max. Load)	1% typ. 1.2% max.
Load Regulation*	3.3V, 5V      12% typ. / 15% max. 9V              7% typ. / 10% max. 12V, 15V      6% typ. / 10% max.

\*Measured from 10% to 100% Load

**GENERAL SPECIFICATION**

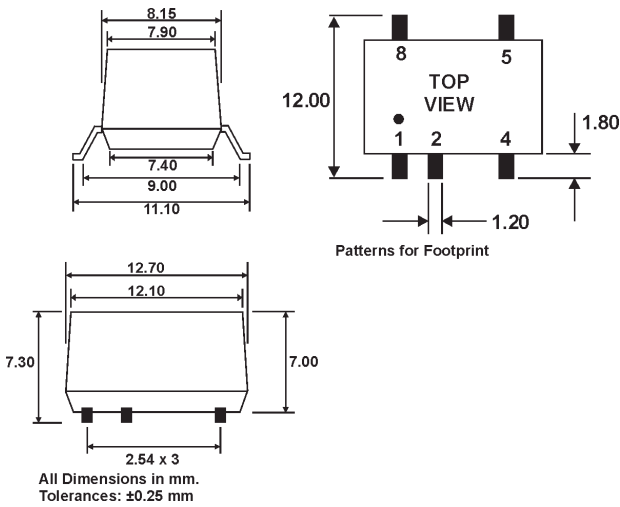
Efficiency	see table
Isolation Voltage Suffix "H3" (not valid for "P8")	1000 VDC 3000 VDC
Isolation Resistance Viso=500V	10 Gohms
Isolation Capacitance	10 pF min. 75 pF max.
Switching Frequency	20 kHz min. 50 kHz typ. 100 kHz max.
Operating Temperature Range	-40°C to +85°C
Storage Temperature Range	-50°C to +125°C
Derating	see diagram
Humidity	95%
Weight Single	1.0 gram
Case Material	DAP WH-9100
ReFlow Temperature RoHS compliant	+240°C max./10-30 sec.
ReFlow Soldering: Infra Red / Air Convection	profile see diagram
MTBF (MIL-HDBK-217F)	at 25°C      1045000 hrs at 85°C      183000 hrs

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**MECHANICAL SPECIFICATIONS**

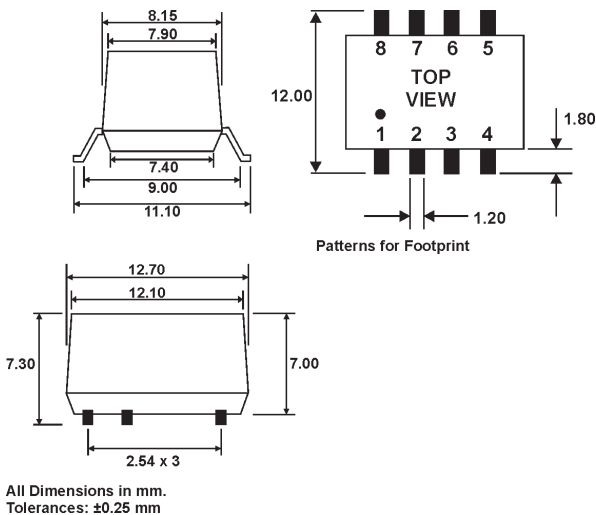
**Case "N" - Standard**



**Standard**

PIN CONNECTIONS	
1	-INPUT
2	+INPUT
4	-OUTPUT
5	+OUTPUT
8	NC

**Case "N" - Suffix "P8"**

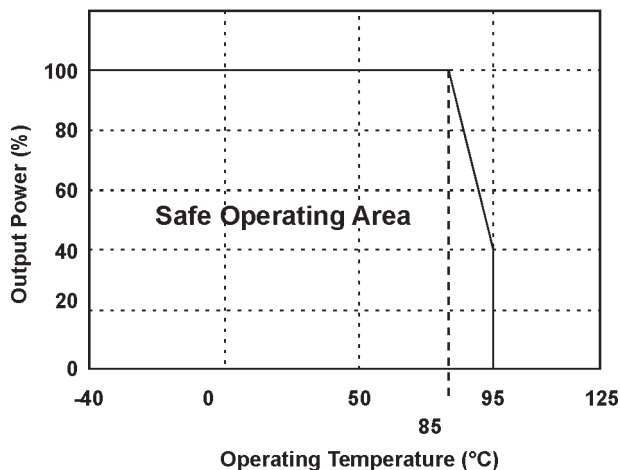


**Suffix "P8"**

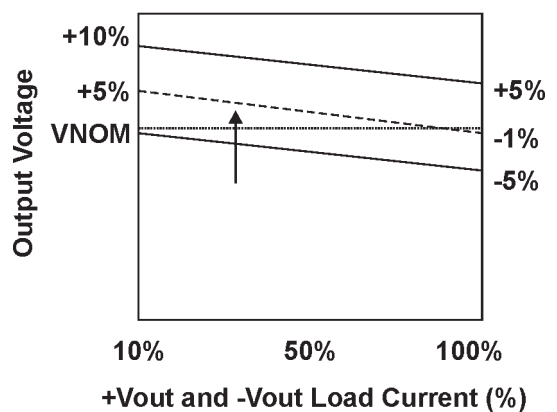
PIN CONNECTIONS	
1	-INPUT
2	+INPUT
4	-OUTPUT
5	+OUTPUT
3 & 6	NC
7 & 8	NC

**DIAGRAMS & APPLICATIONS**

**Derating Curve**  
(Ambient Temperature)

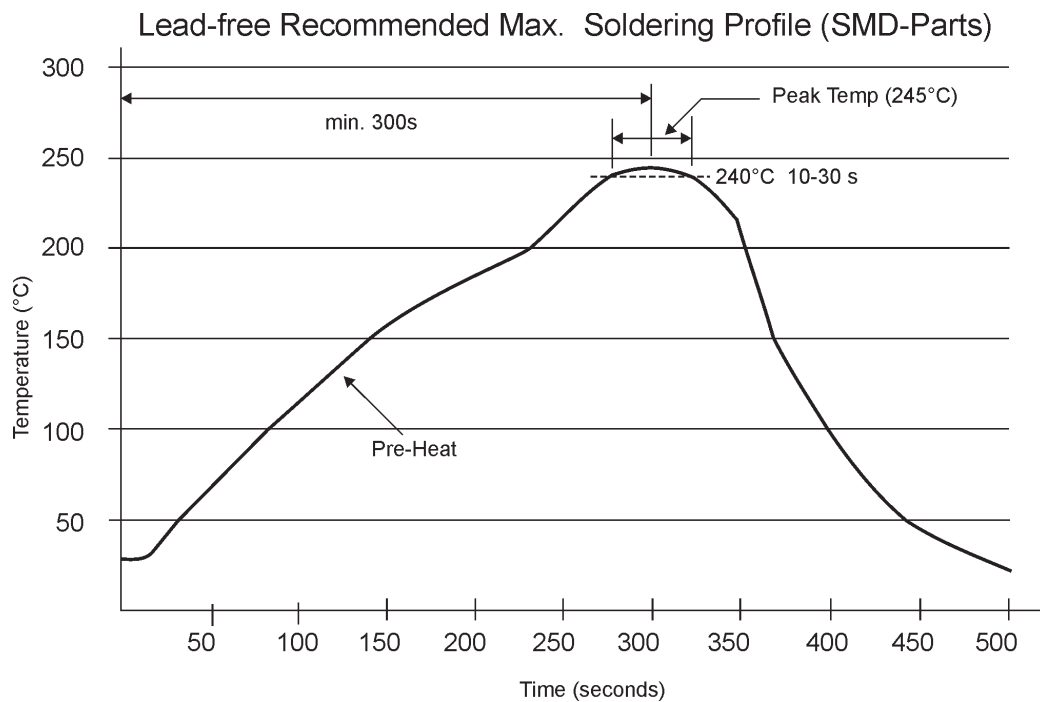


**Tolerance Envelopes**



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Please Notice, that Vapour phase soldering is not recommended!

**External Capacitor Table**

Single			
Vin	External Capacitor	Vout	External Capacitor
3.3 VDC	22 $\mu$ F max.	3.3 VDC	33 $\mu$ F max.
5 VDC	22 $\mu$ F max.	5 VDC	33 $\mu$ F max.
12 VDC	10 $\mu$ F max.	12 VDC	22 $\mu$ F max.
15 VDC	4.7 $\mu$ F max.	15 VDC	10 $\mu$ F max.
24 VDC	2.2 $\mu$ F max.	-	-

**NOTICE:**

The information in this document has been carefully checked. However, no responsibility is assumed for inaccuracies! Specifications can be changed without notice. The latest and most complete information can be found on our website.