TECHNICAL DATA DATA SHEET 4061, REV. B.1

# FIXED POSITIVE 5.0 VOLT 1.5A REGULATOR

# **FEATURES:**

- FIXED VOLTAGE REGULATOR IN A CERAMIC HERMETIC PACKAGE
- SIMILAR to INDUSTRY TYPE 7805A

## **MAXIMUM RATINGS**

All ratings are at  $T_A = 25$ °C unless otherwise specified.

Parameter	Conditions		Maximum	Units
Input Voltage	-	-	35	Vdc
Ambient Operating Temperature	-	-	-55 to +125	°C
Range (T <sub>A</sub> )				
Storage Temperature Range	-	-	-65 to +150	°C
Thermal Resistance (Rθ <sub>JC</sub> )	-	=	4.2	°C/W
Rated Power	T <sub>C</sub> = +25°C	-	20	W

# **ELECTRICAL CHARACTERISTICS**

All characteristics are at  $T_A = 25^{\circ}C$  unless otherwise specified.

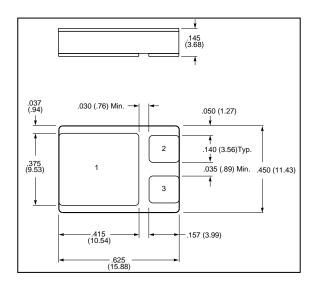
Parameter		Conditions	Minimum	Maximum	Units
Output Voltage	(V <sub>OUT</sub> )	T <sub>2</sub> = 25°C	4.95	5.05	V
output voltago	(1001)	$\frac{V_{A} = 20 \text{ G}}{V_{IN} = 7.5 \text{V to } 20 \text{V}}$ -55°C \le T_A \le +125°C	4.85	5.15	V
Line Regulation	(V <sub>RLINE</sub> )	$V_{IN} = 7.5V \text{ to } 20V$ -55°C \le T_A \le +125°C	-	5.0 12	mV
		$V_{IN} = 8.0V \text{ to } 12V$ -55°C \le T <sub>A</sub> \le +125°C	-	4.0 10	mV
Load Regulation	(V <sub>RLOAD</sub> )	$I_O$ = 5.0 mA to 1.0 A -55°C ≤ $T_A$ ≤ +125°C	-	12 25	mV
		$I_0$ = 250 mA to 750 mA -55°C $\leq$ T <sub>A</sub> $\leq$ +125°C	-	6 15	mV
Standby Current Drain	(I <sub>SCD</sub> )	-	-	6.0 6.5	mA
Standby Current Drain Change With Line	(∆I <sub>SCD</sub> ) (Line)	V <sub>IN</sub> = 7.5V to 20V	-	0.8	mA
Standby Current Drain Change With Load	(∆I <sub>SCD</sub> ) (Load)	I <sub>O</sub> = 5.0 mA to 1000mA	-	0.5	mA
Dropout Voltage	$V_{DO}$	$\Delta V_{OUT} = 100 Mv, I_{O} = 1.0 A$	-	2.5	V
Short Circuit Current	I <sub>DS</sub>	V <sub>IN</sub> = 35V, Maximum assured short circuit protection	-	1.2	А
Ripple Rejection <sup>1</sup>	$\Delta V_{IN}$	$f = 120 \text{ Hz}, \Delta V_{IN} = 10V$	66	-	dB
	$\Delta V_{\text{OUT}}$	-55°C to +125°C	60	-	dB
Output Noise Voltage 1	No	T <sub>A</sub> = 25°C, f = 10Hz to 100kHz	-	40	μV/V RMS
Long Term Stability <sup>1</sup>	$\frac{\Delta V_{OUT}}{\Delta t}$	T <sub>A</sub> = 25°C, t = 1000 hrs.	-	75	mV

<sup>&</sup>lt;sup>1</sup>Guaranteed, not tested in production

SENSITRON SHD519011

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#### **MECHANICAL DIMENSIONS: In Inches / mm**



# SMD-1

## **PINOUT TABLE**

TYPE	PIN 1	PIN 2	PIN 3
LCC-3P, +5V Regulator	GROUND	V <sub>IN</sub>	VOUT

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