

TECHNICAL DATA  
 DATA SHEET 4314, REV. -

## FIXED POSITIVE 3 AMP 5 VOLT LOW DROPOUT VOLTAGE REGULATOR

**FEATURES:**

- ISOLATED HERMETIC PACKAGE
- SIMILAR to INDUSTRY TYPE LT1085-5
- LOW DROP OUT

**MAXIMUM RATINGS**

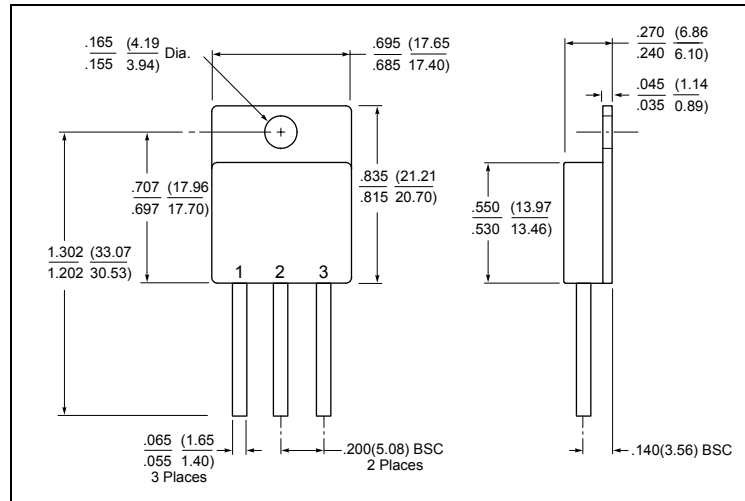
All ratings are at  $T_C = 25^\circ\text{C}$  unless otherwise specified.

Parameter	Conditions	Maximum	Units
Input Voltage	-	30	Vdc
Junction Operating Temperature Range	-	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	-	-65 to +150	$^\circ\text{C}$
Thermal Resistance	-	2.75	$^\circ\text{C/W}$

**ELECTRICAL CHARACTERISTICS**

Symbol	Parameter	Conditions	Min.	Max.	Units
$V_{REF}$	Reference Voltage	$I_{OUT} = 0 \text{ mA}$ , $T_j = 25^\circ\text{C}$ , $V_{IN} = 8 \text{ V}$ $0 \leq I_{OUT} \leq I_{FULL \text{ LOAD}}$ , $6.5 \text{ V} \leq V_{IN} \leq 30 \text{ V}$	4.96 4.92	5.04 5.08	V
$V_{RLINE}$	Line Regulation	$I_{OUT} = 0 \text{ mA}$ , $T_j = 25^\circ\text{C}$ , $6.5 \text{ V} \leq V_{IN} \leq 20 \text{ V}$ $6.5 \text{ V} \leq V_{IN} \leq 30 \text{ V}$		8 20	mV mV
$V_{RLOAD}$	Load Regulation	$V_{IN} = 8 \text{ V}$ , $0 \leq I_{OUT} \leq I_{FULL \text{ LOAD}}$ , $T_j = 25^\circ\text{C}$		20	mV
$V_{DO}$	Dropout Voltage	$\Delta V_{OUT} = 50 \text{ mV}$ , $I_{OUT} = I_{FULL \text{ LOAD}}$		6.5	V
$I_{LIM}$	Current Limit	$V_{IN} = 10 \text{ V}$		4.0	A
$I_Q$	Quiescent Current	$V_{IN} \leq 30 \text{ V}$		10	mA
	Thermal Regulation	$T_A = 25^\circ\text{C}$ , 30 ms pulse		0.02	%/W
	Long Term Stability	$T_A = 125^\circ\text{C}$ , 1000 Hrs.		1.0	%

## SENSITRON

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**MECHANICAL DIMENSIONS: In inches / mm**

**TO-258**
**PINOUT TABLE**

TYPE	PIN 1	PIN 2	PIN 3
TO-258, 5V Regulator	GND	VOUT	VIN

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