

TECHNICAL DATA
DATA SHEET 340, REV. C
Formerly part number - SHD52623

POSITIVE FIXED 15 VOLT 1.5 AMP REGULATOR

FEATURES:

- ISOLATED HERMETIC PACKAGE
- SIMILAR to INDUSTRY TYPE 7815A

MAXIMUM RATINGS

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

Parameter	Conditions	Typical	Limit	Units
Input Voltage	-	-	35	Vdc
Storage Temperature Range	-	-	-65 to +150	$^\circ\text{C}$
Lead Temperature	Soldering, 10 seconds	-	+300	$^\circ\text{C}$
Power Dissipation (P_D)	$T_C = +25^\circ\text{C}$ $T_A = +25^\circ\text{C}$	-	15 3.0	W W
Maximum Thermal Resistance Junction to Case (θ_{JC})	-	-	4.2	$^\circ\text{C/W}$
Maximum Thermal Resistance Junction to Ambient (θ_{JA})	-	-	42	$^\circ\text{C/W}$
Maximum Junction Temperature (T_J)	$I_O = 5.0 \text{ mA to } 1.0 \text{ A}$	-	150	$^\circ\text{C}$
Operating Junction Temperature Range (T_J)	-	-	-55 to +150	$^\circ\text{C}$

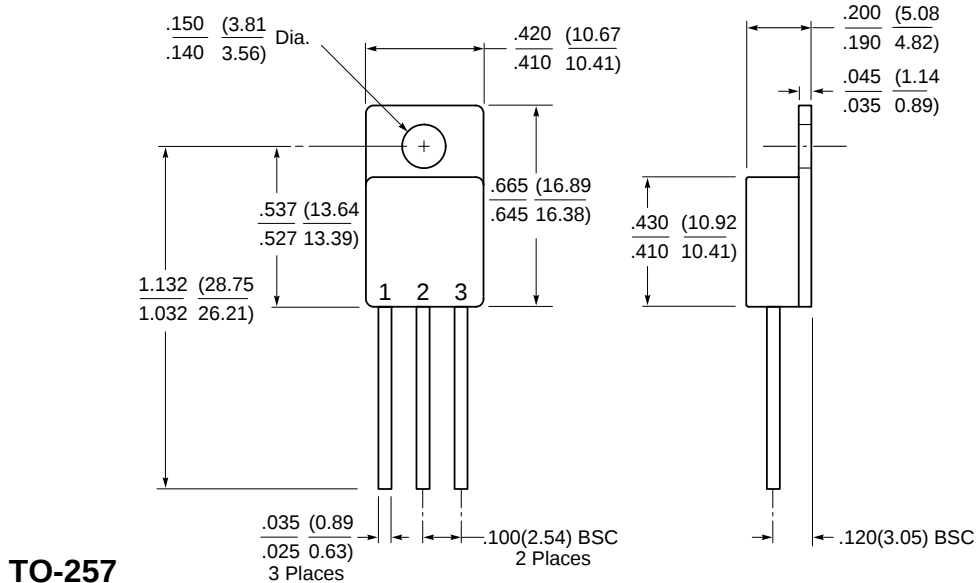
ELECTRICAL CHARACTERISTICS

Parameter	Conditions	Typical	Limit	Units
Output Voltage (V_{OUT})	$T_A = +25^\circ\text{C}$, $V_{IN} = 23\text{V}$, $I_O = 500 \text{ mA}$	15.00	14.8 15.2	V V
	$18.5\text{V} < V_{IN} < 30\text{V}$, $I_O = 500 \text{ mA}$ $-55^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$	15.00	14.6 15.4	
Line Regulation (V_{RLINE})	$V_{IN} = 17.5\text{V to } 30\text{V}$ $-55^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$	-	20 50	mV
Load Regulation (V_{RLOAD})	$I_O = 5.0 \text{ mA to } 1.5 \text{ A}$ $I_O = 5.0 \text{ mA to } 1.0 \text{ A}$ ($-55^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$)	-	35 75	mV
Standby Current Drain (I_{SCD})	-	-	6.5	mA
Standby Current Drain Change w/Line (ΔI_{SCD}) (Line)	$V_{IN} = 18.5 \text{ V to } 30 \text{ V}$	-	0.8	mA
Standby Current Drain Change w/Load (ΔI_{SCD}) (Load)	$I_O = 5.0 \text{ mA to } 1000 \text{ mA}$	-	0.5	mA
Dropout Voltage (V_{DO})	$I_O = 1.0\text{A}$, $T_A = 25^\circ\text{C}$, $\Delta V_{OUT} = 0.1\text{V}$	-	2.5	V
Peak Output Current ($I_{O(pk)}$)	$T_A = +25^\circ\text{C}$	1.5	3.3	A
Short Circuit Current (I_{OS})	$V_{IN} = 35\text{V}$, $T_A = +25^\circ\text{C}$ $V_{IN} = 35\text{V}$, $-55^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$	-	1.2 2.8	A
Ripple Rejection ($\Delta V_{IN} / \Delta V_{OUT}$)	$f_O = 120 \text{ Hz}$, $V_{IN} = 10\text{V}$, $T_A = +25^\circ\text{C}$	-	54	dB
Output Noise Voltage (N_O)	$T_A = +25^\circ\text{C}$ 10 Hz - 100kHz	-	40	μV_{rms}
Long Term Stability ($\Delta V_{OUT} / \Delta t$)	$T_A = 25^\circ\text{C}$, $t = 1,000$	-	150	mV

Note: Test conditions are: $V_{IN} = 23\text{V}$, $I_O = 500\text{mA}$, $T_A = 25^\circ\text{C}$ (Unless otherwise specified)

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MECHANICAL DIMENSIONS



PINOUT TABLE

TYPE	PIN 1	PIN 2	PIN 3
TO - 257, 15V Regulator	V _{IN}	GROUND	V _{OUT}

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