

TECHNICAL DATA
DATA SHEET 843, REV. C

NEGATIVE ADJUSTABLE
1.5 AMP REGULATOR

FEATURES:

- Isolated hermetic package (TO-257)
- Hot solder dipped
- Similar to industry type LM137HV
- Add Suffix "S" for S-100 Screening per MIL-PRF-38535
- Add Suffix "SA" for S-100 Screening per MIL-PRF-38535 and Group A per Method 5005 of MIL-STD-883

ABSOLUTE MAXIMUM RATINGS

Parameter	Conditions	MIN	MAX	Units
Output Current (I_{OUT})	-		1.5	A
Input to Output Voltage Differential	-	-0.3	50	V dc
Storage Temperature Range	-	-	-65 to +150	°C
Junction Temperature	-	-	+150	°C
Power Dissipation (P_D)	-	-	Internally Limited	
Maximum Thermal Resistance Junction to Case (θ_{JC})	-	-	4.2	°C/W
Ambient Operating Temperature Range (T_A)	Recommended Conditions	-	-55 to +125	°C

Note: Lead soldering temperature shall comply with MIL-STD-883 Test Method 2036.1 requirements.

ELECTRICAL CHARACTERISTICS

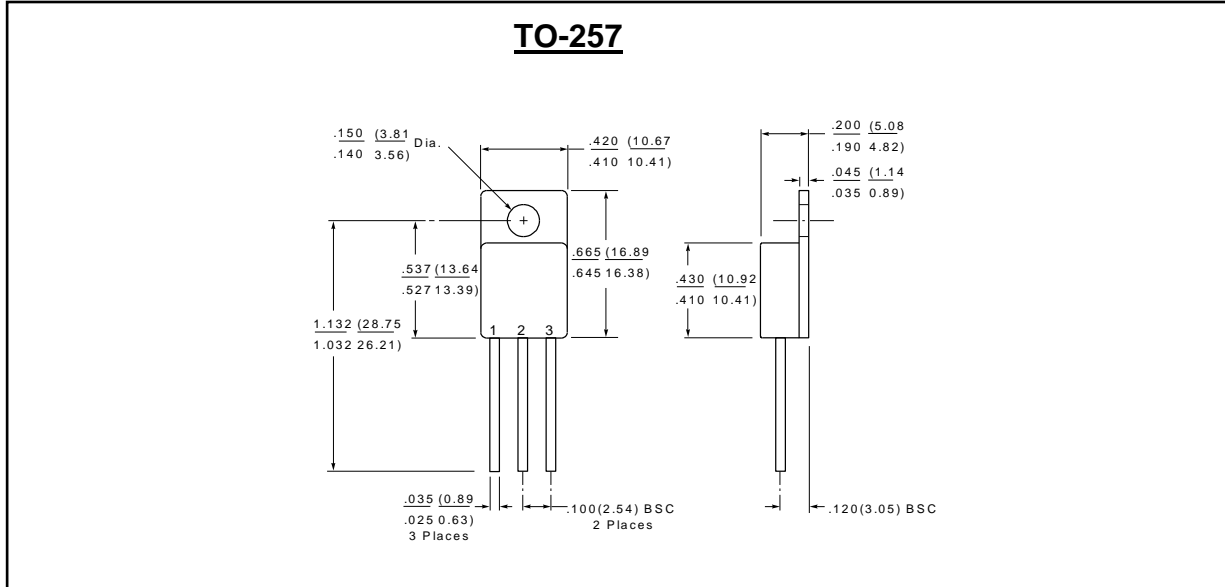
Unless otherwise specified, $T_J = 25^\circ\text{C}$, $V_{IN} = -40\text{V}$, $I_{OUT} = 8.0\text{mA}$

Parameter	Conditions	Min	Typ.	Limit	Units
Reference Voltage	$V_{IN} = -4.25\text{V}$	-1.272	-	-1.230	V
	$V_{IN} = -42\text{V}$	-1.272	-	-1.230	V
	$V_{IN} = -4.25\text{V}$, $T_J = -55^\circ\text{C}$ to 125°C	-1.280	-	-1.225	V
	$V_{IN} = -41.3\text{V}$, $T_J = -55^\circ\text{C}$ to 125°C	-1.280	-	-1.225	V
Line Regulation	$-42\text{V} \leq V_{IN} \leq -4.25\text{V}$	-	-	9.4	mV
	$-41.3\text{V} \leq V_{IN} \leq -4.25\text{V}$, $T_J = -55^\circ\text{C}$ to 125°C	-	-	9.4	mV
Load Regulation	$8\text{mA} \leq I_{OUT} \leq 1.5\text{A}$, $V_{IN} = -6.25\text{V}$ $T_J = -55^\circ\text{C}$ to 125°C	-50	-	50	mV
Adjust Pin Current	$T_J = -55^\circ\text{C}$ to 125°C	-	50	100	μA
Adjust Pin Current Change	$8\text{mA} \leq I_{OUT} \leq 1.5\text{A}$, $V_{IN} = -6.25\text{V}$, $T_J = -55^\circ\text{C}$ to 125°C	-5.0	-	5.0	μA
	$-41.3\text{V} \leq V_{IN} \leq -4.25\text{V}$, $T_J = -55^\circ\text{C}$ to 125°C	-5.0	-	5.0	μA
Minimum Load Current	$V_{IN} = -41.3\text{V}$, $T_J = -55^\circ\text{C}$ to 125°C	-	-	5.0	mA
Current Limit	$V_{IN} = -5\text{V}$	-2.85	-	-1.6	A
	$V_{IN} = -50\text{V}$	-0.8	-	-0.2	A
Temperature Stability	$T_J = -55^\circ\text{C}$ to 125°C	-	1.0	-	%
Ripple Rejection Ratio	$V_{OUT} = -10\text{V}$, $f = 120\text{Hz}$, $C_{ADJ} = 0\mu\text{F}$	-	65	-	dB
	$V_{OUT} = -10\text{V}$, $f = 120\text{Hz}$, $C_{ADJ} = 10\mu\text{F}$	-	80	-	dB
Thermal Regulation	20 ms pulse	-	0.03	0.10	%/W
Long Term Stability ¹	$T_J = +125^\circ\text{C}$, $t = 1,000\text{hrs}$	-	0.3	1.0	%

¹Guaranteed but not tested

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MECHANICAL DIMENSIONS in inches & mm



PINOUT TABLE

TYPE	PIN 1	PIN 2	PIN 3
TO - 257, 1.5A Regulator	ADJUST	V _{IN}	V _{OUT}

PART ORDERING INFORMATION:

Part Number	Description
SHD526060S	Includes S-100 screening per MIL-PRF-38535
SHD526060SA	Includes S-100 screening per MIL-PRF-38535 and Group A testing per Method 5005 of MIL-STD-883

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