

1.1 Scope.

This specification covers the detail requirements for a high precision 2.5V IC reference.

1.2 Part Number.

The complete part number per Table 1 of this specification is as follows:

Device	Part Number
-1	AD580SH/883B
-2	AD580TH/883B
-3	AD580UH/883B

1.2.3 Case Outline.

See Appendix 1 of General Specification ADI-M-1000: package outline: H-03A.

1.3 Absolute Maximum Ratings. ($T_A = +25^\circ\text{C}$ unless otherwise noted)

Input Voltage V_{CC} to Ground	40V
Power Dissipation	350mW
Storage Temperature Range	-65°C to $+150^\circ\text{C}$
Lead Temperature Range (Soldering 10sec)	$+300^\circ\text{C}$

1.5 Thermal Characteristics.

Thermal Resistance $\theta_{JC} = 30^\circ\text{C}/\text{W}$
 $\theta_{JA} = 150^\circ\text{C}/\text{W}$

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Table 1.

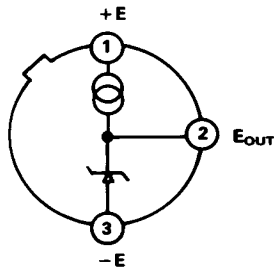
Test	Symbol	Device	Design Limit @ + 25°C	Sub Group 1	Sub Group 2, 3	Sub Group 4	Test Condition ¹	Units
Quiescent Current	I _{CC}	- 1, 2, 3	1.5	1.5				+ mA max
Output Voltage Error	V _{OUT}	- 1	25	25				± mV max
		- 2, 3	10	25		10		
Line Regulation	VR _{LINE1}	- 1	6	6			V _{CC} = 7V to 30V	± mV max
		- 2, 3	2	6		2		
Line Regulation	VR _{LINE2}	- 1	3	3			V _{CC} = 4.5V to 7V	± mV max
		- 2, 3	1	3		1		
Load Regulation	VR _{LOAD}	- 1, 2, 3	10	10			I _L = 0mA to 10mA	± mV max
Output Voltage Temperature Coefficient	TCV _{OUT}	- 1	25		25		T _A = - 55°C to + 125°C	± mV max
		- 2	11		11			
		- 3	4.5		4.5			

NOTE

¹V_{CC} = + 15V, I_L = 0mA, unless otherwise indicated.

3.2.1 Functional Block Diagram and Terminal Assignments.

Bottom View



3.2.4 Microcircuit Technology Group.

This microcircuit is covered by technology group (59).

4.2.1 Life Test/Burn-In Circuit.

Steady state life test is per MIL-STD-883 Method 1005. Burn-in is per MIL-STD-883 Method 1015 test condition (B).

Bottom View

