

### High Temperature Operation (125°C)

This data sheet addendum is to be used in conjunction with the existing AT25XE041B datasheet specifications. The Adesto AT25XE041B 4Mbit Serial Flash devices will operate @ 125°C with the following datasheet caveats. All other parameters will meet the existing datasheet specifications.

The ordering code suffix (CAN# Code) 'HR' or 'HT' must be used to ensure correct operation at this extended temperature range. Adesto will not modify and republish the current datasheet to reflect the CAN# ordering code or the above caveats. The standard [AT25XE041B datasheet](http://www.adestotech.com) is available at <http://www.adestotech.com>.

## 1. Electrical Specifications

### 1.1 DC and AC Operating Range

		AT25XE041B-xxxHR
Operating Temperature		-40°C to +125°C
Endurance (Maximum)		20,000 Cycles

### 1.2 DC, AC, Program and Erase Characteristics

Symbol	Parameter	1.7V to 3.6V			2.3V to 3.6V			Units
		Min	Typ	Max	Min	Typ	Max	
I <sub>UDPD</sub>	Ultra Deep Power-Down Current		.2	.6		.3	.6	
I <sub>DPD</sub>	Deep Power-Down Current		4.5	40		5	40	μA
I <sub>SB</sub>	Standby Current		25	65		25	65	μA
I <sub>CC3</sub> <sup>(1)(2)</sup>	Active Current, Program Operation		9	11		9	11	mA
I <sub>CC4</sub> <sup>(1)(2)</sup>	Active Current, Erase Operation		8	10		8	10	mA
f <sub>RDLF</sub>	Maximum Clock Frequency for 03h			25			25	MHz
t <sub>PP</sub>	Page Program Time (256 Bytes)		1.85	3.75		1.85	3.75	ms
t <sub>BP</sub>	Byte Program Time		12			12		μs
t <sub>PE</sub>	Page Erase Time		6	20		6	20	ms
t <sub>BLKE</sub>	Block Erase Time (4K)		45	75		45	75	ms
	Block Erase Time (32K)		360	550		360	550	ms
	Block Erase Time (64K)		720	1100		720	1100	ms
t <sub>CHPE</sub>	Chip Erase Time		5.5	7.6		5.5	7.6	s

1. Typical values measured at 1.8V @ 25°C for the 1.7V to 3.6V range.
2. Typical values measured at 3.0V @ 25°C for the 2.3V to 3.6V range.

## 2. Ordering Code

### 2.1 Green Package Options (Pb/Halide-free/RoHS Compliant)

Ordering Code <sup>(1)</sup>	Package	Operating Voltage	Max. Freq. (MHz)	Operation Range
AT25XE041B-SSHNHR-T	8S1	1.7V to 3.6V	85MHz	Extended (-40°C to +125°C)
AT25XE041B-SSHNHR-B				
AT25XE041B-MHNHR-T	8MA1			
AT25XE041B-MHNHR-Y				

1. The shipping carrier option code is not marked on the devices.

Package Type	
<b>8S1</b>	8-lead, 0.150" Wide, Plastic Gull Wing Small Outline Package (JEDEC SOIC)
<b>8MA1</b>	8-pad, 5 x 6 x 0.6mm, Thermally Enhanced Plastic Ultra Thin Dual Flat No-lead (UDFN)

## 3. Revision History

Revision Level – Release Date	History
A – June 2015	Initial release.

© 2015 Adesto Technologies. All rights reserved. / Rev.: DS-25XE041B-062A-6/2015 Addendum

Disclaimer: Adesto Technologies Corporation makes no warranty for the use of its products, other than those expressly contained in the Company's standard warranty which is detailed in Adesto's Terms and Conditions located on the Company's web site. The Company assumes no responsibility for any errors which may appear in this document, reserves the right to change devices or specifications detailed herein at any time without notice, and does not make any commitment to update the information contained herein. No licenses to patents or other intellectual property of Adesto are granted by the Company in connection with the sale of Adesto products, expressly or by implication. Adesto's products are not authorized for use as critical components in life support devices or systems.