

Pin Descriptions

Pin Number		Pin Name	Function	
SOIC-8/MSOP-8	SOT-23-5	Pin Name	Function	
1	2	GND	Ground	
2, 3	4	VIN	Supply Input Pin	
4	3	EN/EN	Chip Enable Control Input, Active Low or High	
5	1	FLAG	Fault Flag Pin, Output With Open Drain, Requires a Pull-Up Resistor in Application, Active Low To Indicate OCP or OTP	
6, 7, 8	5	VOUT	Switch Output Voltage	

Absolute Maximum Ratings (Note 2)

Symbol	Parameter	Rating		Unit
V _{IN}	Power Supply Voltage	6.5		V
T_J	Operating Junction Temperature Range	+150		°C
T _{STG}	Storage Temperature Range	-65 to +150		°C
T _{LEAD}	Lead Temperature (Soldering, 10s) +260		60	°C
		SOIC-8	TBD	
ӨЈА	Thermal Resistance (Junction to Ambient)	MSOP-8	TBD	°C/W
		SOT-23-5	TBD	
_	ESD (Machine Model)	20	0	V
_	ESD (Human Body Model)	200	0	V

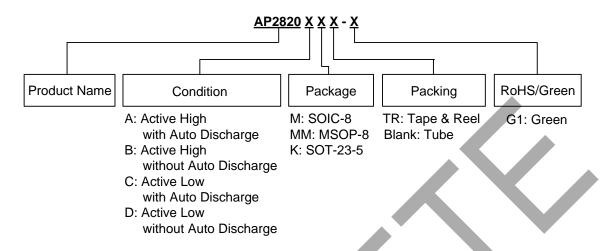
Note: 2. Stresses greater than those listed under Absolute Maximum Ratings can cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated under Recommended Operating Conditions is not implied. Exposure to Absolute Maximum Ratings for extended periods can affect device reliability.

Recommended Operating Conditions

Symbol	Parameter	Min	Max	Unit
V _{IN}	Supply Voltage	2.7	6.0	V
TA	Ambient Operation Temperature Range	-40	+85	°C



Ordering Information



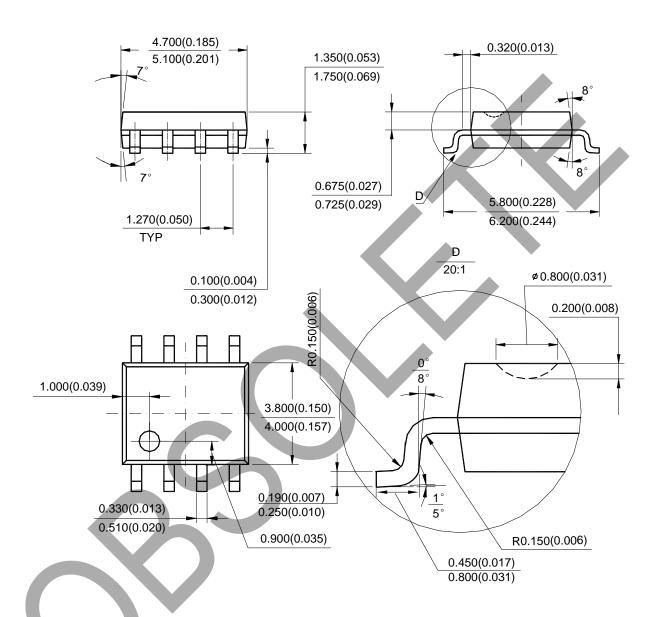
Product	Package	Condition	Temperature Range	Part Number	Marking ID	Packing
	SOIC-8	Active High With Auto Discharge	-40°C to +85°C	AP2820AM-G1 (EOL)	2820AM-G1	Tube
				AP2820AMTR-G1 (EOL)	2820AM-G1	Tape & Reel
	MEOD			AP2820AMM-G1 (EOL)	2820AMM-G1	Tube
	MSOP-8			AP2820AMMTR-G1 (EOL)	2820AMM-G1	Tape & Reel
	SOT-23-5			AP2820AKTR-G1 (EOL)	GCW	Tape & Reel
	SOIC-8	Active High Without Auto Discharge	-40°C to +85°C	AP2820BM-G1 (EOL)	2820BM-G1	Tube
				AP2820BMTR-G1 (EOL)	2820BM-G1	Tape & Reel
	MSOP-8			AP2820BMM-G1 (EOL)	2820BMM-G1	Tube
				AP2820BMMTR-G1 (EOL)	2820BMM-G1	Tape & Reel
AP2820	SOT-23-5			AP2820BKTR-G1 (EOL)	G6Z	Tape & Reel
7 2020	SOIC-8	Active Low With Auto Discharge	-40°C to +85°C	AP2820CM-G1 (EOL)	2820CM-G1	Tube
				AP2820CMTR-G1 (EOL)	2820CM-G1	Tape & Reel
	MSOP-8			AP2820CMM-G1 (EOL)	2820CMM-G1	Tube
				AP2820CMMTR-G1 (EOL)	2820CMM-G1	Tape & Reel
	SOT-23-5			AP2820CKTR-G1 (EOL)	GCZ	Tape & Reel
	SOIC-8	Active Low Without Auto Discharge	-40°C to +85°C	AP2820DM-G1 (EOL)	2820DM-G1	Tube
				AP2820DMTR-G1 (EOL)	2820DM-G1	Tape & Reel
	MSOP-8			AP2820DMM-G1 (EOL)	2820DMM-G1	Tube
				AP2820DMMTR-G1 (EOL)	2820DMM-G1	Tape & Reel
	SOT-23-5			AP2820DKTR-G1 (EOL)	G7Z	Tape & Reel

Note: 3. End of life (EOL).



Package Outline Dimensions (All dimensions in mm (inch).)

(1) Package Type: SOIC-8



Note: Eject hole, oriented hole and mold mark is optional.

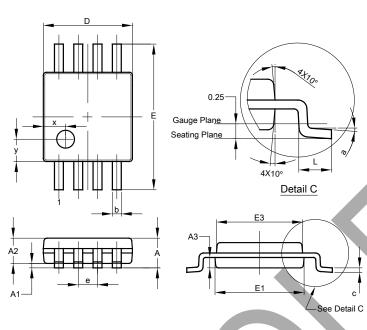


Package Outline Dimensions (continued) (All dimensions in mm(inch).)

Please see http://www.diodes.com/package-outlines.html for the latest version.

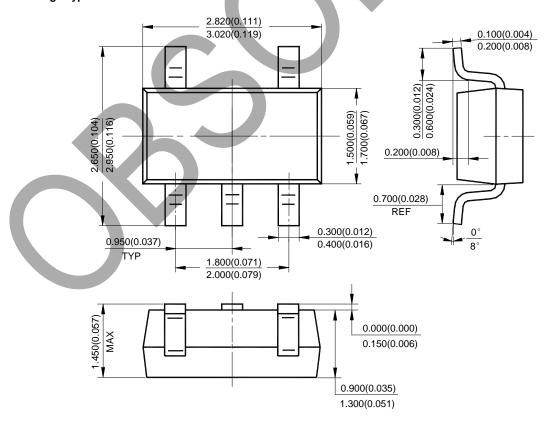
(2) Package Type: MSOP-8

MSOP-8



MSOP-8					
Dim	Min	Max	Тур		
Α	_	1.10	1		
A1 '	0.05	0.15	0.10		
A2	0.75	0.95	0.86		
A3	0.29	0.49	0.39		
b	0.22	0.38	0.30		
С	0.08	0.23	0.15		
D	2.90	3.10	3.00		
Е	4.70	5.10	4.90		
E1	2.90	3.10	3.00		
E3	2.85	3.05	2.95		
е	_	_	0.65		
L	0.40	0.80	0.60		
а	0°	8°	4°		
Х	_		0.750		
у	_		0.750		
All Dimensions in mm					

(3) Package Type: SOT-23-5

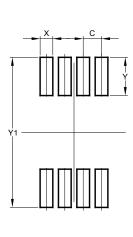




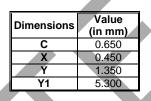
Suggested Pad Layout (All dimensions in mm(inch).)

Please see http://www.diodes.com/package-outlines.html for the latest version.

(1) Package Type: MSOP-8



MSOP-8





IMPORTANT NOTICE

DIODES INCORPORATED MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH REGARDS TO THIS DOCUMENT, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION).

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to this document and any product described herein. Diodes Incorporated does not assume any liability arising out of the application or use of this document or any product described herein; neither does Diodes Incorporated convey any license under its patent or trademark rights, nor the rights of others. Any Customer or user of this document or products described herein in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on Diodes Incorporated website, harmless against all damages.

Diodes Incorporated does not warrant or accept any liability whatsoever in respect of any products purchased through unauthorized sales channel. Should Customers purchase or use Diodes Incorporated products for any unintended or unauthorized application, Customers shall indemnify and hold Diodes Incorporated and its representatives harmless against all claims, damages, expenses, and attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized application.

Products described herein may be covered by one or more United States, international or foreign patents pending. Product names and markings noted herein may also be covered by one or more United States, international or foreign trademarks.

This document is written in English but may be translated into multiple languages for reference. Only the English version of this document is the final and determinative format released by Diodes Incorporated.

LIFE SUPPORT

Diodes Incorporated products are specifically not authorized for use as critical components in life support devices or systems without the express written approval of the Chief Executive Officer of Diodes Incorporated. As used herein:

- A. Life support devices or systems are devices or systems which:
 - 1. are intended to implant into the body, or
 - 2. support or sustain life and whose failure to perform when properly used in accordance with instructions for use provided in the labeling can be reasonably expected to result in significant injury to the user.
- B. A critical component is any component in a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or to affect its safety or effectiveness.

Customers represent that they have all necessary expertise in the safety and regulatory ramifications of their life support devices or systems, and acknowledge and agree that they are solely responsible for all legal, regulatory and safety-related requirements concerning their products and any use of Diodes Incorporated products in such safety-critical, life support devices or systems, notwithstanding any devices- or systems-related information or support that may be provided by Diodes Incorporated. Further, Customers must fully indemnify Diodes Incorporated and its representatives against any damages arising out of the use of Diodes Incorporated products in such safety-critical, life support devices or systems.

Copyright © 2018, Diodes Incorporated

www.diodes.com