

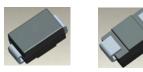
Features

- 400W Peak Pulse Power Dissipation
- Unidirectional and Bidirectional Versions Available
- Excellent Clamping Capability
- Fast Response Time
- Lead-Free Finish; RoHS Compliant (Notes 1 & 2)
- Halogen and Antimony Free. "Green" Device (Note 3)

Mechanical Data

- Case: SMA
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Lead Free Plating (Matte Tin Finish). Solderable per MIL-STD-202, Method 208 ⁽²³⁾
- Polarity Indicator: Cathode Band (Note: Bi-directional devices have no polarity indicator.)
- Weight: 0.064 grams (approximate)

SMA



Top View

Bottom View

Ordering Information (Note 4)

Part Number	Case	Packaging
PSMAJ400(C)A-13	SMA	5000/Tape & Reel

1. EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant. All applicable RoHS exemptions applied.

See http://www.diodes.com for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

For packaging details, go to our website at http://www.diodes.com.

Marking Information

Notes:



400x = Product type marking code 400C - BI 400A - UNI)'' = Manufacturers' code marking YWW = Date code marking Y = Last digit of year (ex: 2 for 2012) WW = Week code (01 to 53)

Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation (Non repetitive current pulse derated above $T_A = +25^{\circ} \text{ C}$, $T_{P} = 1 \text{ ms}$) (Note 5)	P _{PK}	400	W
Peak Forward Surge Current, 8.3ms Single Half Sine Wave Superimposed on Rated Load (Notes 6 & 7)	IFSM	40	A
Steady State Power Dissipation @ T _L = +120°C	PM _(AV)	1.0	W
Instantaneous Forward Voltage @ IPP = 25A (Notes 6 & 7)	VF	6.5	V

Notes: 5. Non-repetitive current pulse, per Fig. 4 and derated above $T_A = +25^{\circ}$ C, per Fig.1.

6. Measured with 8.3ms single half sine-wave. Duty cycle = 4 pulses per minute maximum.

7. Unidirectional units only.



Thermal Characteristics

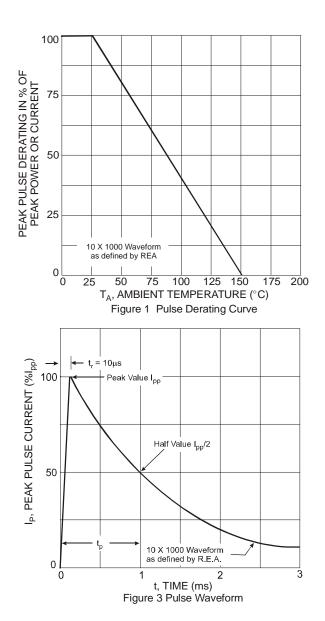
Characteristic	Symbol	Value	Unit
Operating Temperature Range	TJ	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +175	°C

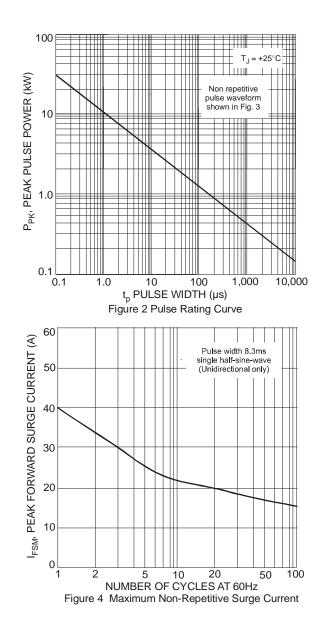
Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Part Number Add C For Bidirectional	Reverse Standoff Voltage		down age (Note 9)	Test Current	Max. Reverse Leakage @ V _{RWM}	Max. Clamping Voltage @ I _{pp}	Max. Peak Pulse Current I _{pp}	Markin	g Code
(Note 8)	V _{RWM} (V)	Min (V)	Max (V)	I _T (mA)	Ι _R (μΑ)	V _C (V)	(A)	BI-	UNI-
PSMAJ400(C)A	342	380	420	1.0	5.0	548.0	0.73	400C	400A

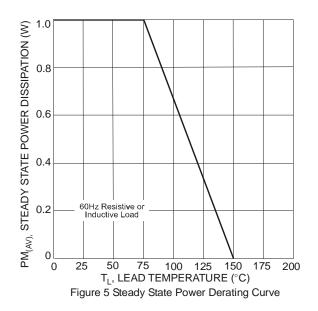
Notes: 8. Suffix C denotes Bi-directional device.

9. V_{BR} measured with I_T current pulse = $300 \mu s$



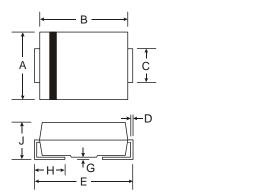






Package Outline Dimensions

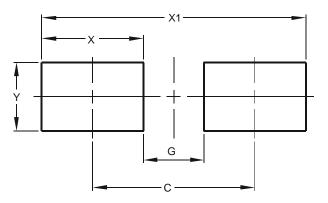
Please see AP02002 at http://www.diodes.com/datasheets/ap02002.pdf for latest version.



SMA				
Dim	Min	Max		
Α	2.29	2.92		
В	4.00	4.60		
с	1.27	1.63		
D	0.15	0.31		
ш	4.80	5.59		
G	0.05	0.20		
Н	0.76	1.52		
J	2.01	2.30		
All Dimensions in mm				

Suggested Pad Layout

Please see AP02001 at http://www.diodes.com/datasheets/ap02001.pdf for the latest version.



Dimensions	Value (in mm)
С	4.00
G	1.50
Х	2.50
X1	6.50
Y	1.70



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