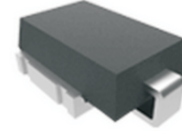


## ATV66SM826A-G

**Working Voltage: 26 Volts**  
**Peak Pulse Power: 6600 Watts**  
**RoHS Device**

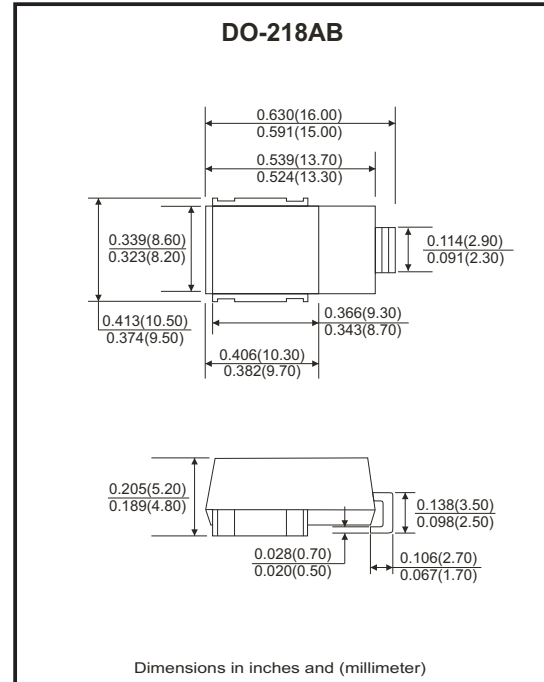


### Features

- Glass passivated chip.
- 6600W peak pulse power capability with a 10/1000 $\mu$ s waveform, repetitive rate (duty cycle):0.01%
- Meets ISO7637-2 5a surge specification.
- Low leakage.
- Uni-directional polarity.
- Excellent clamping capability.
- Very fast response time.
- RoHS compliant.
- Comply with AEC-Q101

### Mechanical Data

- Case: DO-218AB
- Epoxy: UL 94V-0 rate flame retardant.



### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

Parameter	Symbol	Value	Units
Peak power dissipation with a 10/1000 $\mu$ s waveform (Note 1)	P <sub>PP</sub>	6600	W
Peak power dissipation with a 10/10,000 $\mu$ s waveform	P <sub>PP</sub>	5200	W
Peak pulse current with a 10/1000 $\mu$ s waveform (Note 1)	I <sub>PP</sub>	170.0	A
Power dissipation on infinite heatsink at T <sub>L</sub> =25°C	P <sub>D</sub>	8.0	W
Peak forward surge current, 8.3ms single half sine-wave uni-directional only	I <sub>FSM</sub>	700	A
Operation junction temperature range	T <sub>J</sub>	-55 to +175	°C
Storage temperature range	T <sub>STG</sub>	-55 to +175	°C

Note:  
 1. Non-repetitive current pulse per Fig.2 and derated above T<sub>A</sub>=25°C per Fig.1

## Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Max	Unit
Working peak reverse voltage		$V_{RWM}$	-	26	V
Breakdown voltage	$I_T = 5\text{mA}$	$V_{BR}$	28.9	31.9	V
Reverse leakage current	$V_{RWM} = 24\text{V}, T_J = 25^\circ\text{C}$	$I_R$	-	10	$\mu\text{A}$
	$V_{RWM} = 24\text{V}, T_J = 175^\circ\text{C}$		-	150	
Reverse Surge current (Note 1)		$I_{PP}$	-	157	A
Clamping voltage	$I_{PP} = 157\text{A}$	$V_C$	-	42.1	V

Note:

1) Surge current waveform is defined at 10/1000 $\mu\text{s}$  waveform.

## Rating and Characteristics Curves (ATV66SM826A-G)

Fig.1 - Pulse Derating Curve

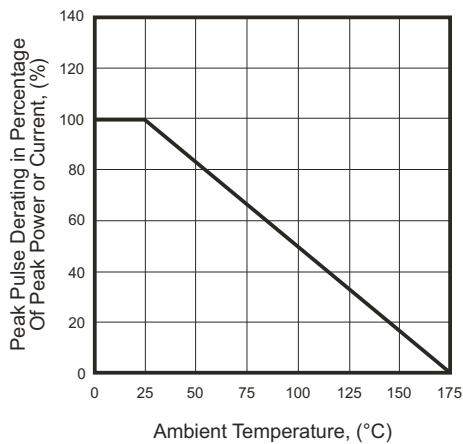


Fig.2 - 8/20 $\mu\text{s}$  Peak Pulse Current Waveform Acc. IEC 61000-4-5

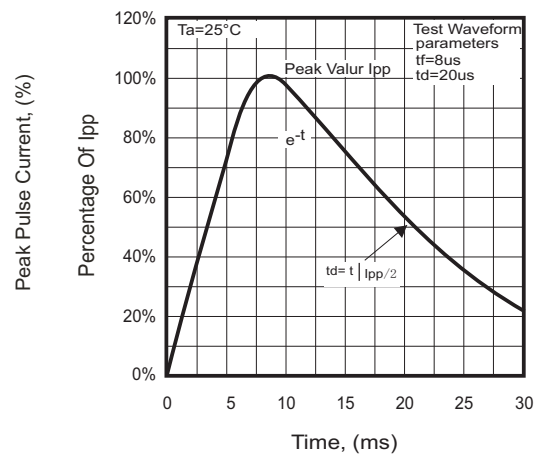


Fig.3 - Steady State Power Derating Curve

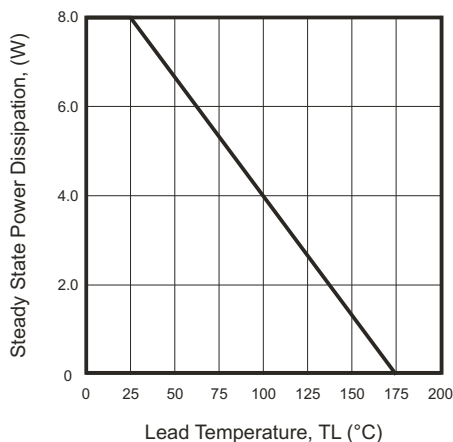
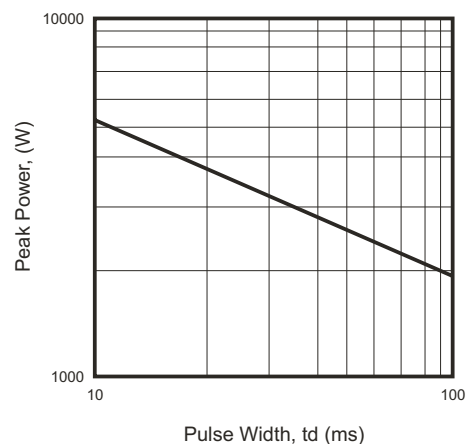


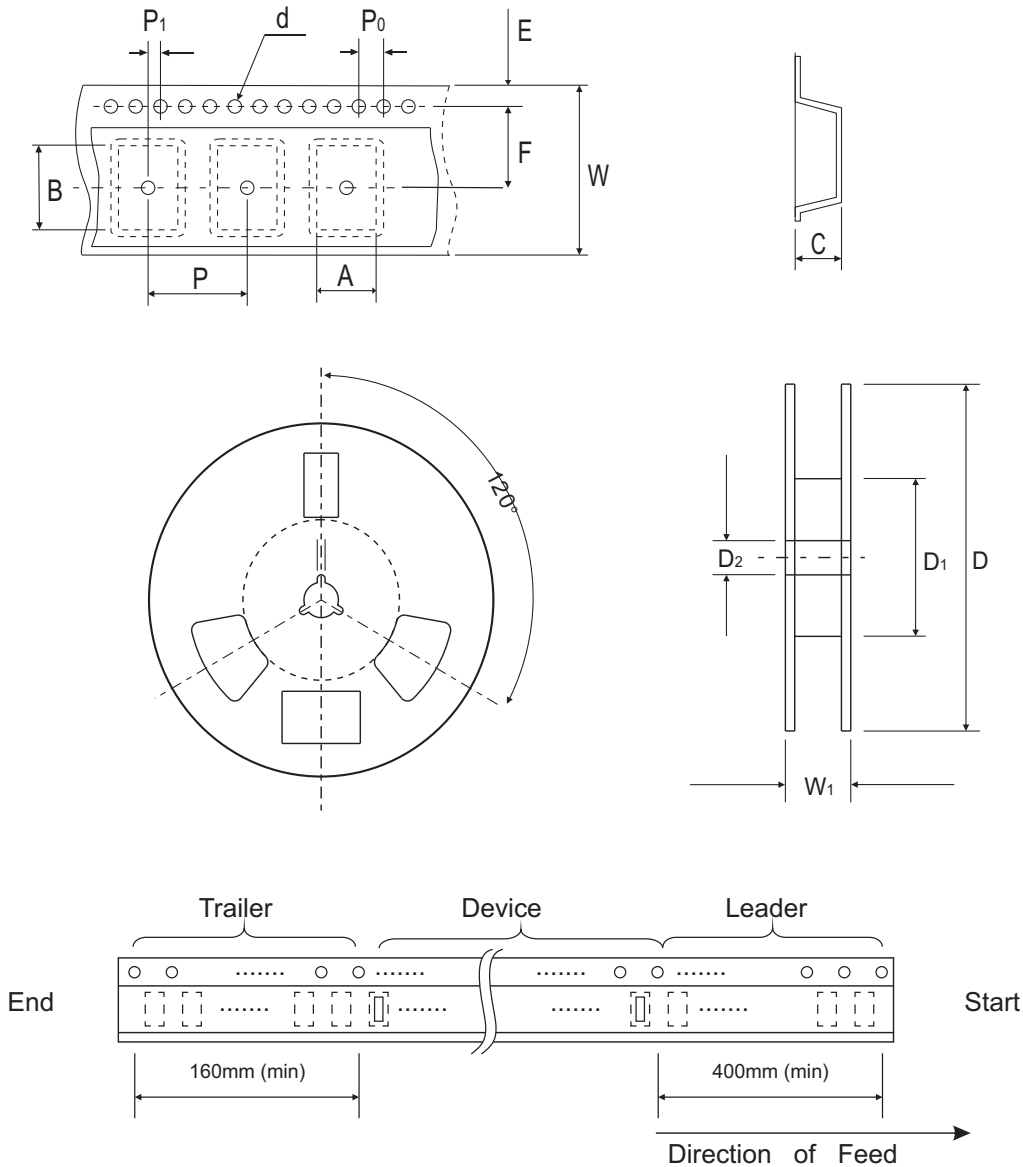
Fig.4 - Peak Pulse Power Rating Curve



Company reserves the right to improve product design, functions and reliability without notice.

REV: A

## Reel Taping Specification



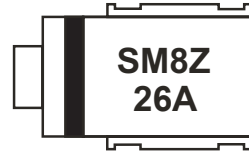
DO-218AB	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	10.77 ± 0.10	16.33 ± 0.10	6.02 ± 0.10	1.50 + 0.10	330 ± 2.00	50.0 (MAX.)	20.2 (MAX.)
	(inch)	0.424 ± 0.004	0.643 ± 0.004	0.237 ± 0.004	0.059 + 0.004	12.992 ± 0.079	1.97 (MAX.)	0.795 (MAX.)

DO-218AB	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	11.50 ± 0.10	16.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	24.00+0.30/-0.10	30.4 (MAX.)
	(inch)	0.069 ± 0.004	0.453 ± 0.002	0.630 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.945+0.012/-0.004	1.197 (MAX.)

Company reserves the right to improve product design , functions and reliability without notice.

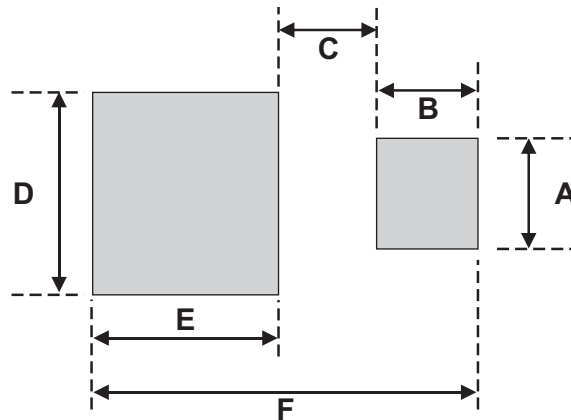
## Marking Code

Part Number	Marking Code
ATV66SM826A-G	SM8Z 26A



## Suggested PAD Layout

SIZE	DO-218AB	
	(mm)	(inch)
A	3.50	0.138
B	3.00	0.118
C	3.30	0.130
D	11.00	0.433
E	9.50	0.374
F	15.80	0.622



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
DO-218AB	500	13