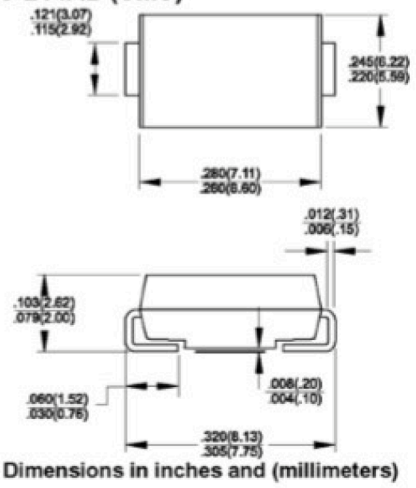
ASMCJ36A and ASMCJ36CA

Surface Mount Transient Voltage Suppressors
Peak Pulse Power 1500W Stand Off Voltage 36V

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated junction
- Low incremental surge resistance, excellent clamping capability
- 1500W peak pulse power capability with a 10/1000us wave-form, repetition rate(duty cycle):0.01%
- Very fast response time
- High temperature soldering guaranteed: 250℃/10 seconds at terminals
- AEC-Q101 Qualified

DO-214AB (SMC)



Dimensions in inches and (millimeters)

Mechanical Data

- Cases: JEDEC DO-214AB(SMC) molded plastic
- Terminals: Solder plated,solderable per MIL-STD-750, Method 2026
- Polarity: For uni-directional types the band denotes the cathode, Which is positive with respect to the anode under normal TVS operation
- Weight:0.007oz., 0.21 gram

Devices for Bidirectional Application

For bi-directional device, use suffix CA(e.g.ASMCJ36CA).

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Peak pulse power dissipation with a 10/1000us waveform(1,2)	P_{PPM}	Min.1500	W
Peak pulse current with a 10/1000us waveform(1)	I_{PPM}	See Next Table	A
Peak forward surge current, 8.3ms single half sine-wave uni-directional only(2)	I_{FSM}	200	A
Typical thermal resistance from junction to ambient(3)	R_{THJA}	75	℃/W
Typical thermal resistance from junction to lead	R_{THJL}	15	℃/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	℃

Notes:1.Non-repetitive current pulse, per Fig.3 and derated above T_A=25℃ per Fig.2

2. Mounted on 0.31*0.31”(8.0*8.0mm) copper pads to each terminal

3. Mounted on minimum recommended pad layout

Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified. V_F=3.5V at I_F=100A(uni-directional only)

Device type	Device marking code		Breakdown voltage $V_{(BR)}$ (Volts)(1)		Test current at I_T(mA)	Stand-off voltage V_{WM}(Volts)	Maximum reverse leakage at V_{WM} I_D(3) (uA)	Maximum peak pulse current I_{PPM}(2)(A)	Maximum clamping voltage at I_{PPM} V_C(Volts)
	UNI	BI	Min.	Max					
ASMCJ36A/CA	AGFP	ABFP	40.0	44.2	1.0	36	1.0	25.8	58.1

Notes: 1. $V_{(BR)}$ measured after I_T applied for 300us square wave pulse or equivalent

2. Surge current waveform per Fig. 3 and derate per Fig.2

3. For bi-directional types having V_{WM} of 10Volts and less, the I_D limit is doubled

Ratings And Characteristic Curves

Fig. 1 – Peak Pulse Power Rating Curve

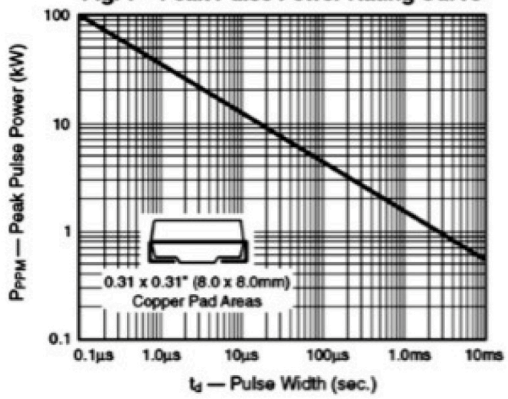


Fig. 2 – Pulse Derating Curve

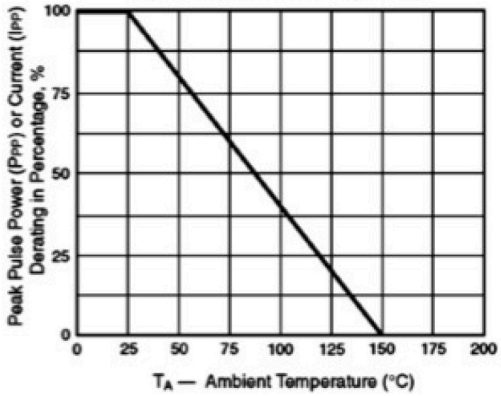


Fig. 3 – Pulse Waveform

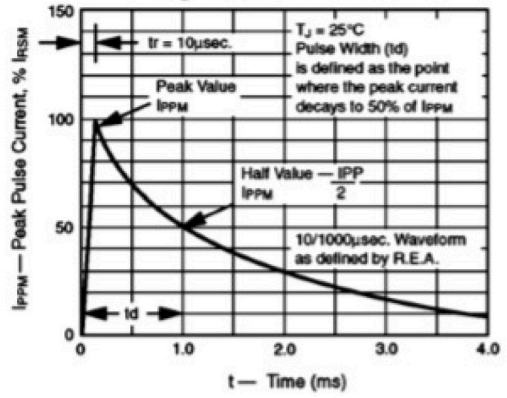


Fig. 4 – Typical Junction Capacitance Uni-Directional

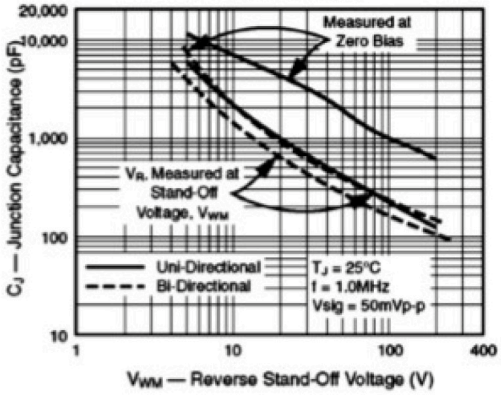


Fig. 5 – Typical Transient Thermal Impedance

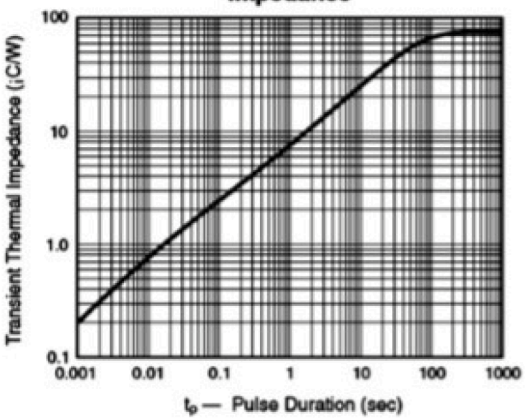
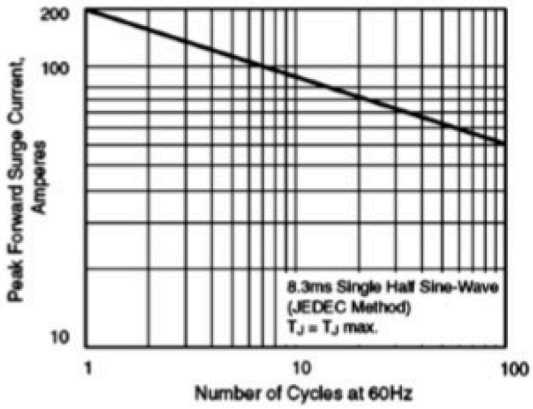
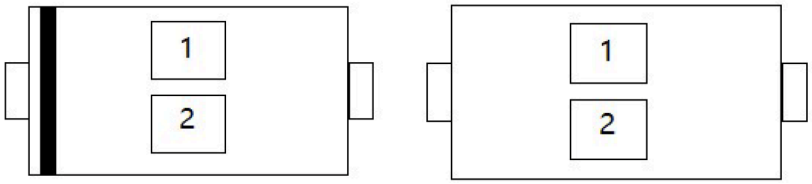


Fig. 6 - Maximum Non-Repetitive Forward Surge Current Uni-Directional Use Only



Marking Information



For Uni-Directional For Bi-Directional

1. Date code (See below Annual code and Monthly code)
2. Marking or marking code

Annual code

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Code	9	A	B	C	D	E	F	G	H	J	K	0

Monthly code

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O	N	D

History

Revised date	Content	Version#	Remark
	Original		
Jan-16-2017	Add marking spec	Rev.B	