

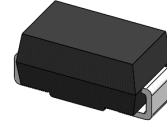
400W,10 - 100V Transient Voltage Suppressors

Features

- Very fast response time
- Glass passivated junction
- Moisture sensitivity: level 1, per J-STD-020
- Available in unidirectional and bidirectional
- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Halogen-free according to IEC 61249-2-21 definition
- 400W peak pulse power capability with a 10/1000 μ s waveform
- AEC-Q101 qualified



RoHS
COMPLIANT



DO-214AC(SMA)

Applications

- SMPS
- Adapters
- Monitor

Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Ratings	Unit
Peak power dissipation with a 10/1000us waveform	P_{PPM}	400	W
Peak pulse current with a 10/1000us waveform	I_{PPM}	See Next Table	A
Power dissipation, on infinite heat sink at $T_L=75^\circ\text{C}$	P_D	3	W
Peak forward surge current, 8.3ms single half-sine wave	I_{FSM}	40	A
Typical Thermal Resistance , Junction to Ambient	$R_{\theta JA}$	90	$^\circ\text{C/W}$
Typical Thermal Resistance , Junction to Case	$R_{\theta JC}$	20	$^\circ\text{C/W}$
Typical Thermal Resistance , Junction to Lead	$R_{\theta JL}$	25	$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$



ASMAJ10A thru ASMAJ100CA

GOOD-ARK Electronics

Electrical Characteristics (TA = 25 °C unless otherwise noted)

Part Number (Uni)	Part Number (Bi)	Marking		Breakdown Voltage VBR (Volts)		Test Current I _T (mA)	Stand off Voltage V _{WM} (Volts)	Maximum reverse leakage at V _{WM} I _D (μA)	Maximum Peak Pulse Current I _{PPM} (A)	Maximum Clamping Voltage at I _{PPM} V _C (Volts)
		UNI	BI	Min	Max					
ASMAJ11A	ASMAJ11CA	AAZ	AWZ	12.2	13.5	1.0	11	1.0	22.0	18.2
ASMAJ12A	ASMAJ12CA	ABE	AXE	13.3	14.7	1.0	12	1.0	20.1	19.9
ASMAJ13A	ASMAJ13CA	ABG	AXG	14.4	15.9	1.0	13	1.0	18.6	21.5
ASMAJ14A	ASMAJ14CA	ABK	AXK	15.6	17.2	1.0	14	1.0	17.2	23.2
ASMAJ15A	ASMAJ15CA	ABM	AXM	16.7	18.5	1.0	15	1.0	16.4	24.4
ASMAJ16A	ASMAJ16CA	ABP	AXP	17.8	19.7	1.0	16	1.0	15.4	26.0
ASMAJ17A	ASMAJ17CA	ABR	AXR	18.9	20.9	1.0	17	1.0	14.5	27.6
ASMAJ18A	ASMAJ18CA	ABT	AXT	20.0	22.1	1.0	18	1.0	13.7	29.2
ASMAJ20A	ASMAJ20CA	ABV	AXV	22.2	24.5	1.0	20	1.0	12.3	32.4
ASMAJ22A	ASMAJ22CA	ABX	AXX	24.4	26.9	1.0	22	1.0	11.3	35.5
ASMAJ24A	ASMAJ24CA	ABZ	AXZ	26.7	29.5	1.0	24	1.0	10.3	38.9
ASMAJ26A	ASMAJ26CA	ACE	AYE	28.9	31.9	1.0	26	1.0	9.5	42.1
ASMAJ28A	ASMAJ28CA	ACG	AYG	31.1	34.4	1.0	28	1.0	8.8	45.4
ASMAJ30A	ASMAJ30CA	ACK	AYK	33.3	36.8	1.0	30	1.0	8.3	48.4
ASMAJ33A	ASMAJ33CA	ACM	AYM	36.7	40.6	1.0	33	1.0	7.5	53.3
ASMAJ36A	ASMAJ36CA	ACP	AYP	40.0	44.4	1.0	36	1.0	6.9	58.1
ASMAJ40A	ASMAJ40CA	ACR	AYR	44.4	49.1	1.0	40	1.0	6.2	64.5
ASMAJ43A	ASMAJ43CA	ACT	AYT	47.8	52.8	1.0	43	1.0	5.8	69.4
ASMAJ45A	ASMAJ45CA	ACV	AYV	50.0	55.3	1.0	45	1.0	5.5	72.7
ASMAJ48A	ASMAJ48CA	ACX	AYX	53.3	58.9	1.0	48	1.0	5.2	77.4
ASMAJ51A	ASMAJ51CA	ACZ	AYZ	56.7	62.7	1.0	51	1.0	4.9	82.4
ASMAJ54A	ASMAJ54CA	ARE	AZE	60.0	66.3	1.0	54	1.0	4.6	87.1
ASMAJ58A	ASMAJ58CA	ARG	AZG	64.4	71.2	1.0	58	1.0	4.3	93.6
ASMAJ60A	ASMAJ60CA	ARK	AZK	66.7	73.7	1.0	60	1.0	4.1	96.8
ASMAJ64A	ASMAJ64CA	ARM	AZM	71.1	78.6	1.0	64	1.0	3.9	103
ASMAJ70A	ASMAJ70CA	ARP	AZP	77.8	86.0	1.0	70	1.0	3.5	113
ASMAJ75A	ASMAJ75CA	ARR	AZR	83.3	92.1	1.0	75	1.0	3.3	121
ASMAJ78A	ASMAJ78CA	ART	AZT	86.7	95.8	1.0	78	1.0	3.2	126
ASMAJ85A	ASMAJ85CA	ARV	AZV	94.4	104	1.0	85	1.0	2.9	137
ASMAJ90A	ASMAJ90CA	ARX	AZX	100	111	1.0	90	1.0	2.7	146
ASMAJ100A	ASMAJ100CA	ARZ	AZZ	111	123	1.0	100	1.0	2.5	162

Note:

1. The thermal resistance from junction to ambient, case or lead, mounted on P.C.B with 5×5mm copper pads

Ratings and Characteristics Curves

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

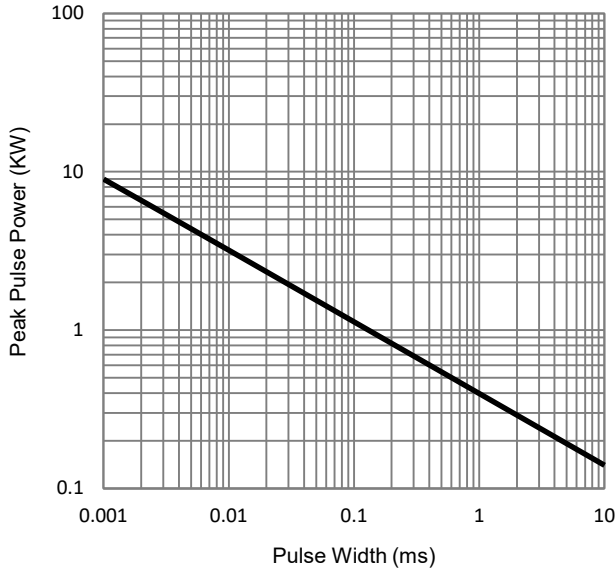


Fig.1 - Peak Pulse Power Derating Curve

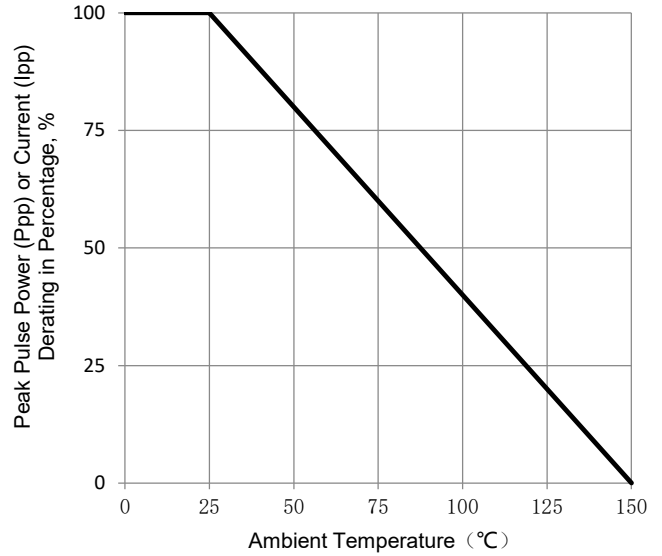


Fig.2 - Pulse Power vs Ambient Temperature

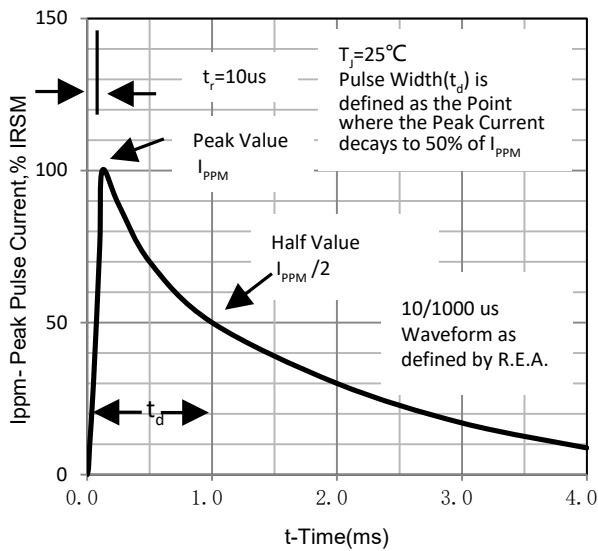


Fig.3 - Pulse Waveform

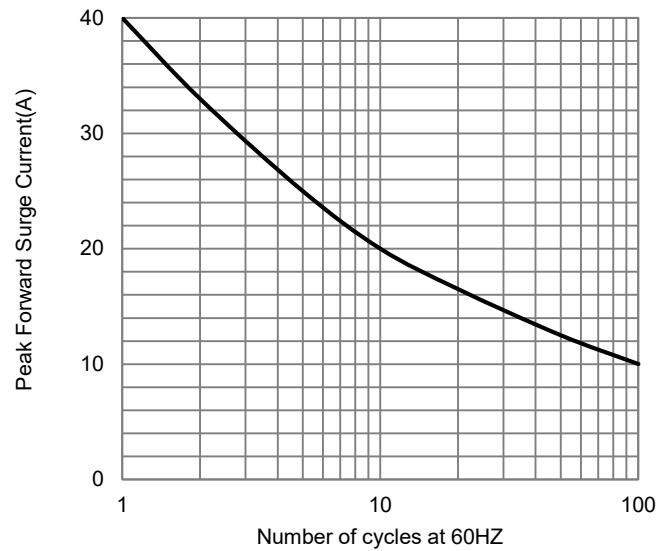
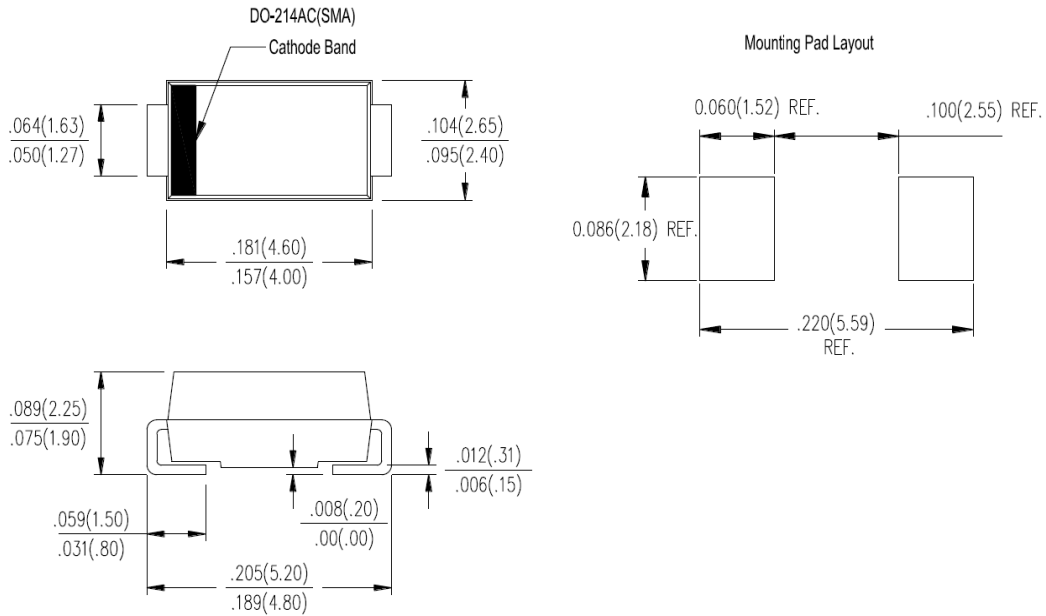


Fig.4 - Maximum Non-Repetitive Surge Current

Package Outline Dimensions

in inches (millimeters)

SMA (DO-214AC)



Revision History

Document Version	Date of release	Description of changes
Rev.A	2021.06.15	Released Datasheet
Rev.B	2023.10.24	Modify document format



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