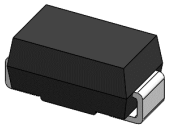
600W,10 - 28V Transient Voltage Suppressors

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
- 600W peak pulse power capability with a 10/1000 μs waveform
- AEC-Q101 qualified

Pb
RoHS
COMPLIANT



SMA(DO-214AC)

Applications

- SMPS
- Adapters
- Monitor

Absolute Maximum Ratings (T_A=25°C unless otherwise noted)			
Parameter	**Symbol**	**Ratings**	**Unit**
Peak power dissipation with a 10/1000us waveform	P_{PPM}	600	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℃	P_D	3	W
Peak forward surge current, 8.3ms single half-sine wave	I_{FSM}	50	A
Typical Thermal Resistance , Junction to Ambient	$R_{\theta JA}$	90	℃/W
Typical Thermal Resistance , Junction to Case	$R_{\theta JC}$	20	℃/W
Typical Thermal Resistance , Junction to Lead	$R_{\theta JL}$	25	℃/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	℃

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 VWM I_D (μA)	Maximum Peak Pulse Current I_{ppM} (A)	Maximum Clamping Voltage at I_{PPM} V_C(Volts)
		UNI	BI	Min	Max					
ASMA6J10A	ASMA6J10CA	AKX	AAX	11.1	12.3	1.0	10	5.0	35.3	17.0
ASMA6J11A	ASMA6J11CA	AKZ	AAZ	12.2	13.5	1.0	11	5.0	33.0	18.2
ASMA6J12A	ASMA6J12CA	ALE	ABE	13.3	14.7	1.0	12	5.0	30.2	19.9
ASMA6J13A	ASMA6J13CA	ALG	ABG	14.4	15.9	1.0	13	1.0	27.9	21.5
ASMA6J14A	ASMA6J14CA	ALK	ABK	15.6	17.2	1.0	14	1.0	25.9	23.2
ASMA6J15A	ASMA6J15CA	ALM	ABM	16.7	18.5	1.0	15	1.0	24.6	24.4
ASMA6J16A	ASMA6J16CA	ALP	ABP	17.8	19.7	1.0	16	1.0	23.1	26.0
ASMA6J17A	ASMA6J17CA	ALR	ABR	18.9	20.9	1.0	17	1.0	21.7	27.6
ASMA6J18A	ASMA6J18CA	ALT	ABT	20.0	22.1	1.0	18	1.0	20.5	29.2
ASMA6J20A	ASMA6J20CA	ALV	ABV	22.2	24.5	1.0	20	1.0	18.5	32.4
ASMA6J22A	ASMA6J22CA	ALX	ABX	24.4	26.9	1.0	22	1.0	16.9	35.5
ASMA6J24A	ASMA6J24CA	ALZ	ABZ	26.7	29.5	1.0	24	1.0	15.4	38.9
ASMA6J26A	ASMA6J26CA	AME	ACE	28.9	31.9	1.0	26	1.0	14.3	42.1
ASMA6J28A	ASMA6J28CA	AMG	ACG	31.1	34.4	1.0	28	1.0	13.2	45.4

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℃ unless otherwise noted)

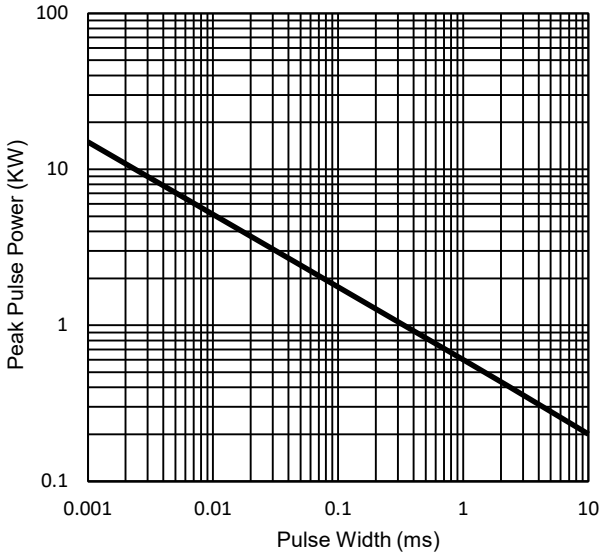


Fig.1 –Peak Pulse Power Derating Curve

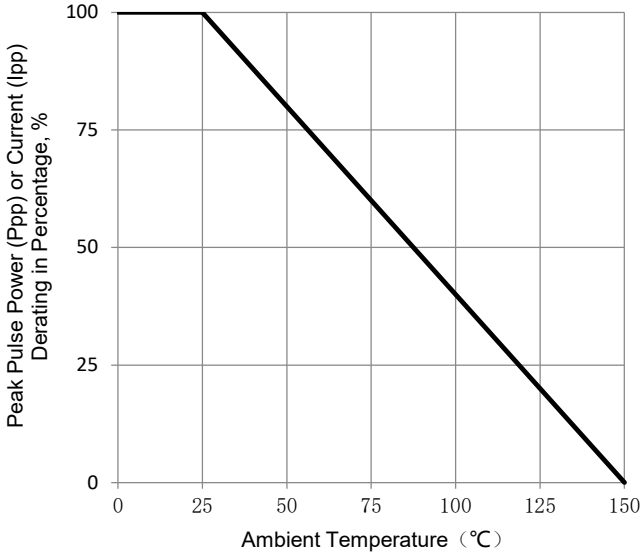


Fig.2 – Pulse Power vs Ambient Temperature

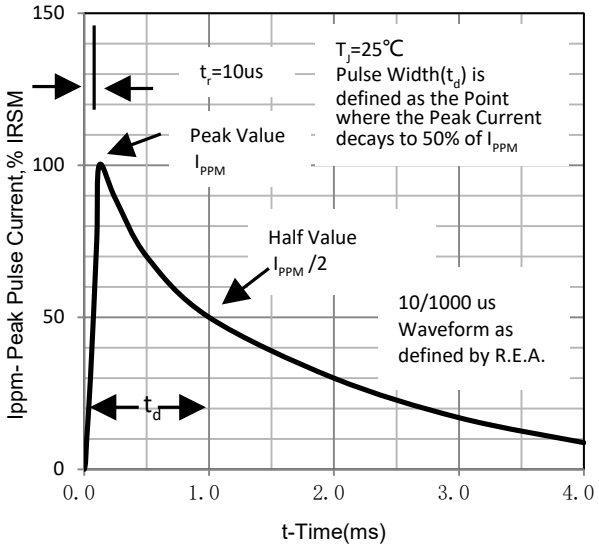


Fig.3 – Pulse Waveform

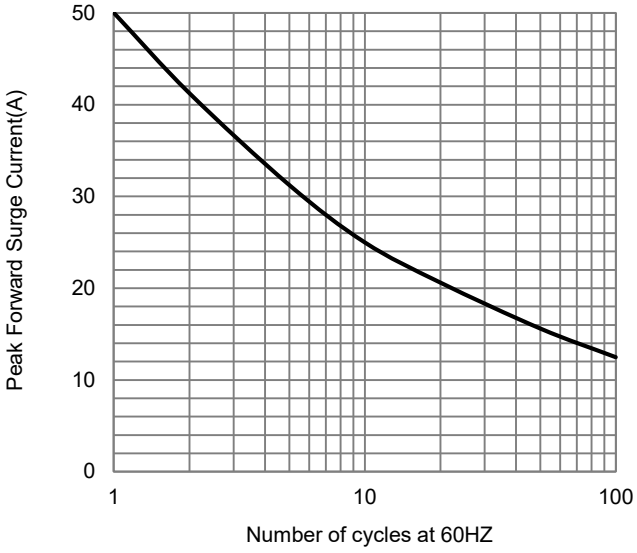
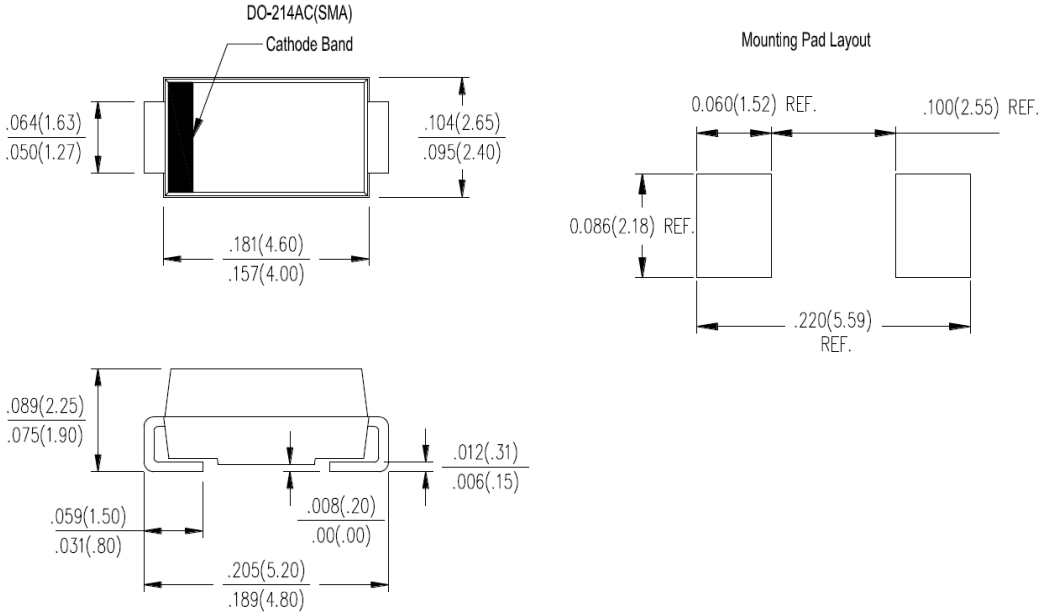


Fig.4 – Maximum Non-Repetitive Surge Current

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
Rev.C	2023.12.20	Update product range

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