



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Micro Commercial Components



Micro Commercial Components
 20736 Marilla Street Chatsworth
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SM5S14A THRU SM5S36A

3600 Watt Transient Voltage Suppressors 14 to 36 Volts

Features

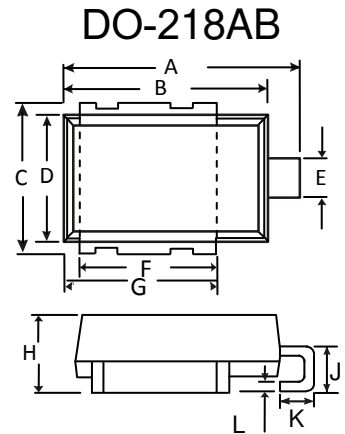
- Low Leakage
- Glass passivated junction
- Excellent clamping capability
- Uni-directional polarity
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"
- Polarity: Heatsink is anode
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Meet ISO7637-2 5a surge specification
- AEC-Q101 Qualified

Maximum Rating:

- Operating Temperature: -55°C to +175°C
- Storage Temperature: -55°C to +175°C

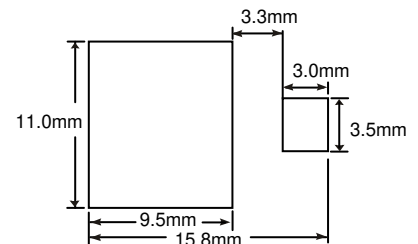
Peak Pulse Current with a 10/1000us waveform	I _{PPM}	See Table 1	Note 2
Peak Power Dissipation with a 10/1000us waveform	P _{PPM}	3600W	Note 2
Peak Power Dissipation with a 10/10000us waveform	P _{PPM}	2800W	Note 2
Peak Forward Surge Current	I _{FSM}	500A	Note:3
Power Dissipation On Infinite Heatsink At T _L =25°C	P _D	5.0W	

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.
 2. Non-repetitive current pulse, per Fig.2 and derated above T_A=25°C per Fig.1
 3. Peak forward surge current 8.3 ms single half sine



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.590	0.630	15.00	16.00	
B	0.524	0.539	13.30	13.70	
C	0.374	0.413	9.50	10.50	
D	0.323	0.339	8.20	8.60	
E	0.091	0.114	2.30	2.90	
F	0.343	0.366	8.70	9.30	
G	0.382	0.406	9.70	10.30	
H	0.189	0.205	4.80	5.20	
J	0.098	0.138	2.50	3.50	
K	0.067	0.106	1.70	2.70	
L	0.020	0.028	0.50	0.70	

SUGGESTED SOLDER PAD LAYOUT



SM5S14A THRU SM5S36A

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

Part Number	Breakdown Voltage V_{BR} @ I_T			Maximum Reverse Leakage I_R @ V_{RWM} (μA)	Maximum I_R @ V_{RWM} $T_J=175$ (μA)	Working Peak Reverse Voltage V_{RWM} (V)	Maximum Reverse Surge Current I_{PP} (A) ⁽¹⁾	Maximum Clamping Voltage V_C @ I_{PP} (V)
	Min (V)	Max (V)	I_T (mA)					
SM5S14A	15.60	17.20	5	10	150	14	155.0	23.2
SM5S15A	16.70	18.50	5	10	150	15	148.0	24.4
SM5S16A	17.80	19.70	5	10	150	16	138.0	26.0
SM5S17A	18.90	20.90	5	10	150	17	130.0	27.6
SM5S18A	20.00	22.10	5	10	150	18	123.0	29.2
SM5S20A	22.20	24.50	5	10	150	20	111.0	32.4
SM5S22A	24.40	26.90	5	10	150	22	101.0	35.5
SM5S24A	26.70	29.50	5	10	150	24	93.0	38.9
SM5S26A	28.90	31.90	5	10	150	26	86.0	42.1
SM5S28A	31.10	34.40	5	10	150	28	79.0	45.4
SM5S30A	33.30	36.80	5	10	150	30	74.0	48.4
SM5S33A	36.70	40.60	5	10	150	33	68.0	53.3
SM5S36A	40.00	44.20	5	10	150	36	62.0	58.1

NOTE 1 : Surge current waveform is defined at 10/1000uS waveform

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

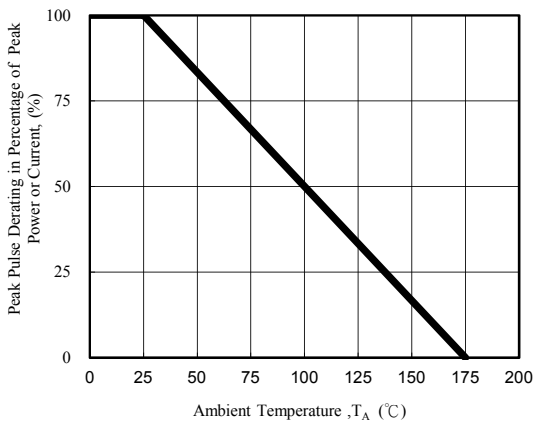


Fig. 1 - Pulse Derating Curve

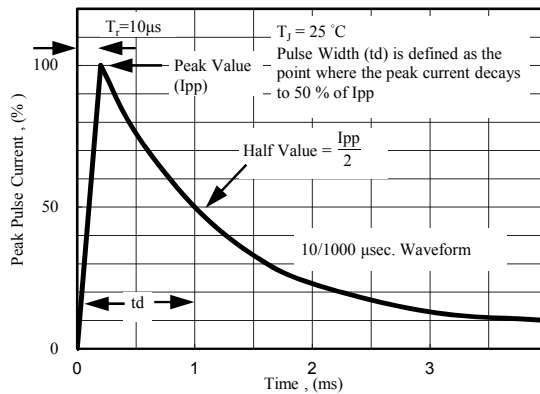


Fig. 2 - Pulse Waveform

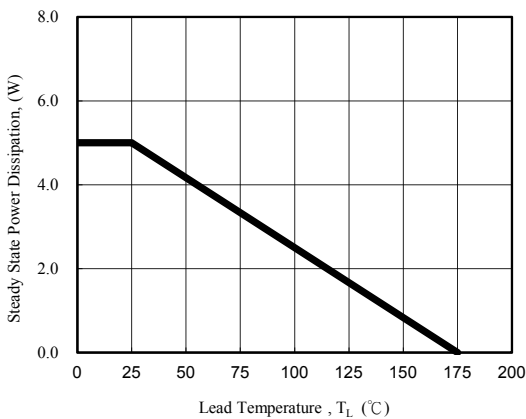


Fig. 3 - Steady State Power Derating Curve

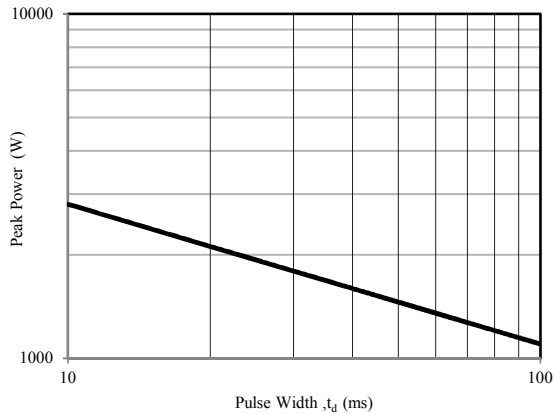


Fig. 4 - Peak Pulse Power Rating Curve



Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 750pcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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