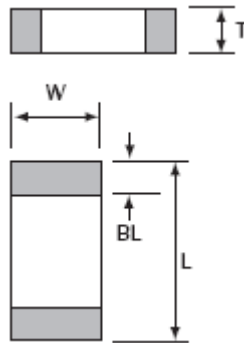




# Automotive StaticGuard



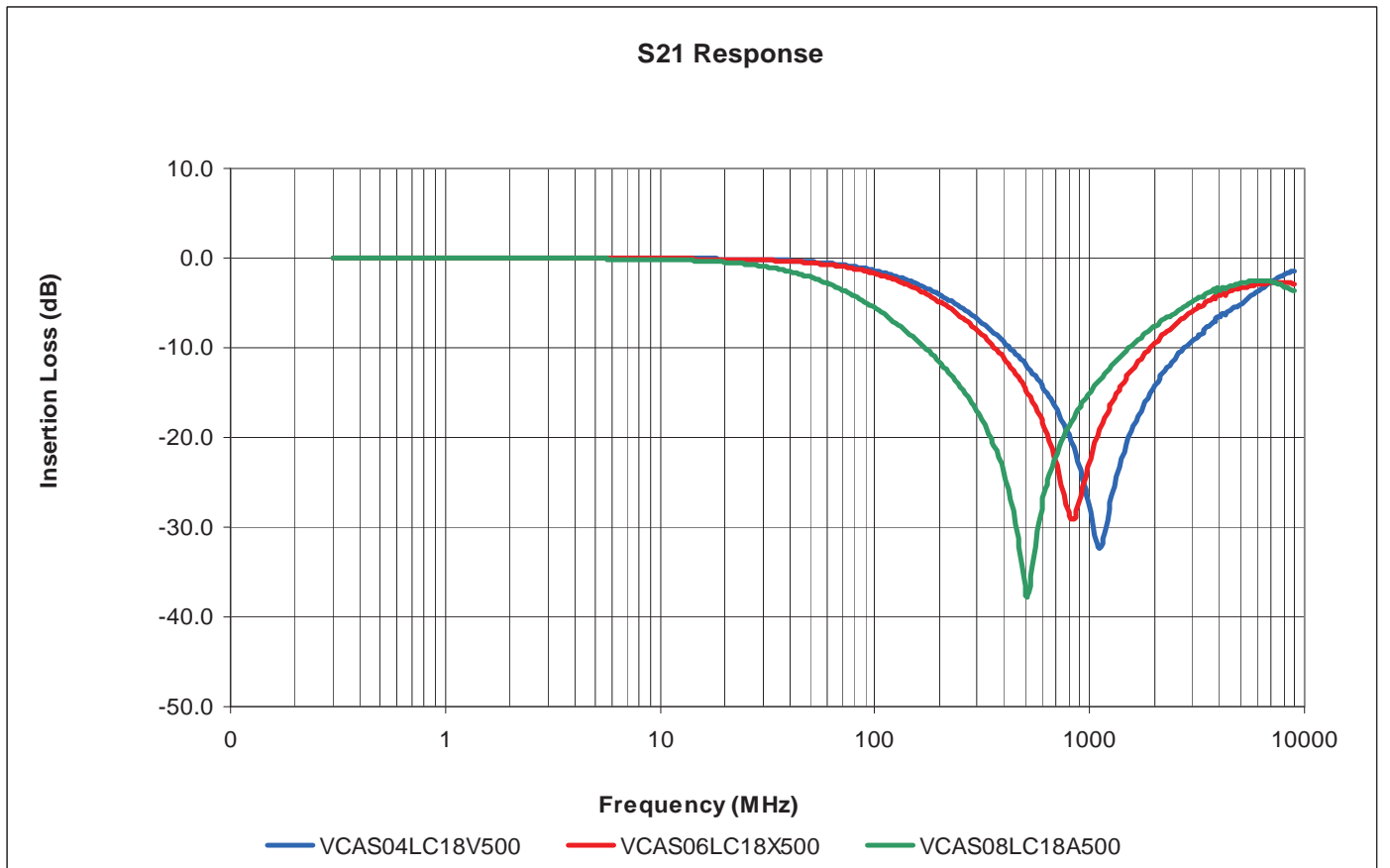
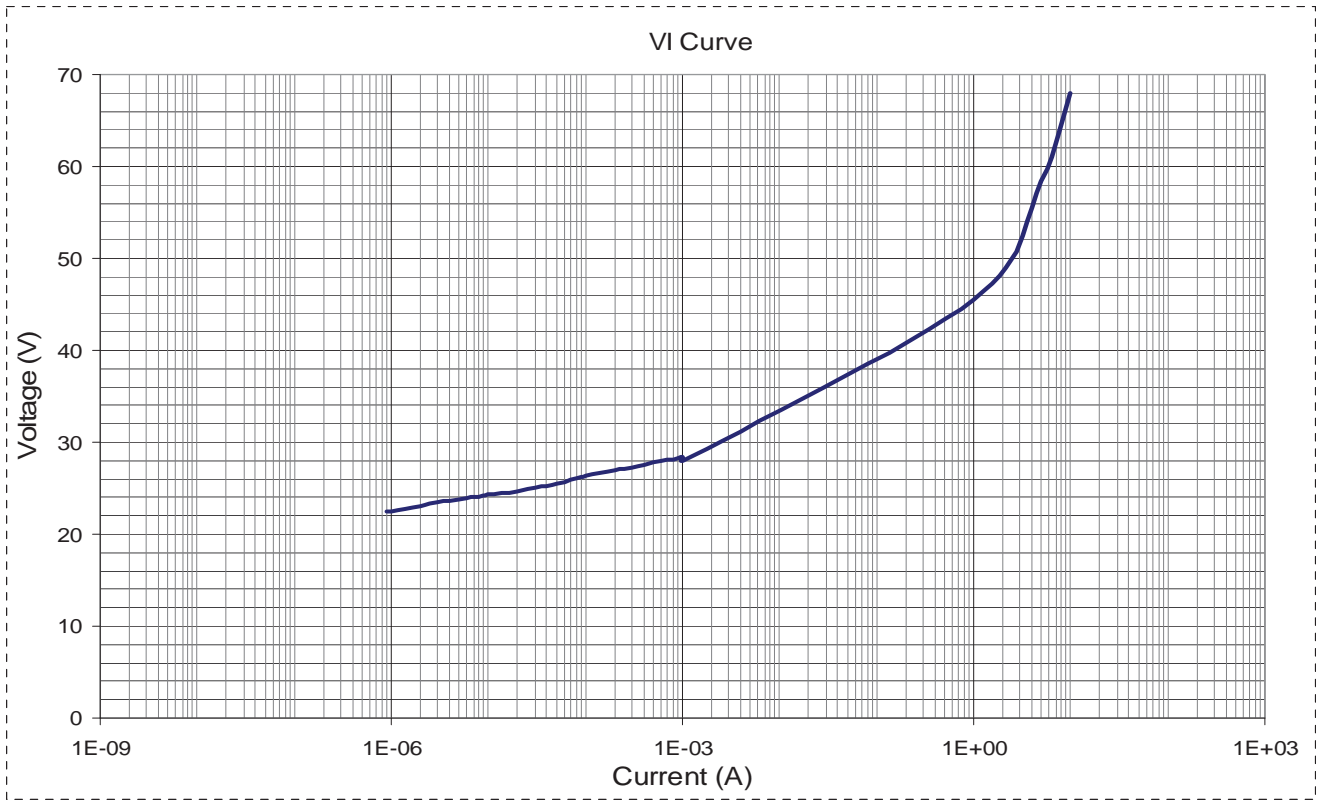
Size (EIA)	0402	0603	0805
<b>L</b>	1.00 ±0.10 (0.040 ±0.004)	1.60±.15 (0.063±0.006)	2.01±.20 (0.079±0.008)
<b>W</b>	0.50 ±0.10 (0.020 ±0.004)	0.80±0.15 (0.032±0.006)	1.25±0.20 (0.049±0.008)
<b>T</b>	0.60 Max. (0.024 Max.)	0.90 Max (0.035 Max.)	1.02 Max (0.040 Max.)
<b>BL</b>	0.25 ±0.15 (0.010 ±0.006)	0.35±0.15 (0.014±0.006)	0.71 Max (0.028 Max)

<u>VC</u>	<u>AS</u>	<u>06</u>	<u>LC</u>	<u>18</u>	<u>X</u>	<u>500</u>	<u>R</u>	<u>P</u>
Varistor Chip	Series AS = Automotive	Case 04=0402 06 = 0603 08 = 0805	Low Cap Design	Working Voltage 18=18VDC	Energy Rating A=0.1J V=0.02J X=0.05J	Clamping Voltage 500=50V	Package D=1000 R=4000 T=1000 W=0402 10000	Termination P=Ni/Sn

AVX Part Number	Working Voltage (DC)	Working Voltage (AC)	Clamping Voltage	Test Current For V <sub>c</sub>	Maximum Leakage Current	Transient Energy Rating	Peak Current Rating	Typical Capacitance	Case Size	Jump Start	Power Dissipation
VCAS04LC18V500	≤ 18	≤ 14	50	1	10	0.02	15	40	0402	27.5	0.0004
VCAS06LC18X500	≤ 18	≤ 14	50	1	10	0.05	30	50	0603	27.5	0.001
VCAS08LC18A500	≤ 18	≤ 14	50	1	10	0.10	30	80	0805	27.5	0.002

**V<sub>w</sub>(DC)** DC Working Voltage [V]  
**V<sub>w</sub>(AC)** AC Working Voltage [V]  
**V<sub>c</sub>** Clamping Voltage [V @ 1mA]  
**I<sub>vc</sub>** Test Current for V<sub>c</sub>

**I<sub>L</sub>** Maximum leakage current at the working voltage [μA]  
**E<sub>t</sub>** Transient Energy Rating [J, 10x1000μS]  
**I<sub>p</sub>** Peak Current Rating [A, 8x20μS]  
**Cap** Typical capacitance [pF] @ frequency specified and 0.5V<sub>RMS</sub>



No.	Item	Requirement	Test Method
1	Operating Temp.	-55°C to +125° C	
2	Appearance/Dimensions	No visible damage Dimensions: see par 6	Visual examination at 10% magnification Dimensions verification by class2 caliper
3	Solderability	The dipped surface shall be at least 95% covered with a new smooth solder coating.	Soak in eutectic solder bath of temperature at 230+/-5°C for 5sec.
4	Solder heat resistance	No mechanical damage. Capacitance: 3 pF Leakage: <100nA	<ul style="list-style-type: none"> <li>a. Read capacitance and leakage.</li> <li>b. Soak in eutectic solder bath of temperature at 260+/-5°C. for 10+/-1sec.</li> <li>c. Natural cool down to +25°C</li> <li>d. Read capacitance and leakage after 24+/-2 hours.</li> </ul>

5	Humidity Life	Capacitance: 3 pF Leakage: <100nA	<ul style="list-style-type: none"> <li>a. Read capacitance and leakage.</li> <li>b. Leave device in chamber of +85+/-3°C, 85+/-5% relative humidity for 1,000± 5hours.</li> <li>c. Read capacitance and leakage after 3-4 hours conditioning at 25+/-5°C</li> </ul>
6	Life Test	Capacitance: 3 pF Leakage: <100nA	<ul style="list-style-type: none"> <li>a. Read capacitance and leakage.</li> <li>b. Apply 100% of working voltage at test temperature of 125+/-4°C for 1,000+48/-0hours.</li> <li>c. Read capacitance and leakage after 24+/-2 hours conditioning at 25+/- 5°C</li> </ul>