

AVX

A KYOCERA GROUP COMPANY



AVX Circuit Protection & Signal Integrity Capability Guide

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Applications Guide

Circuit Protection & Signal Integrity



	AVX PRODUCTS																		
	Fast Blow SMT Fuse (Surface Mount Fuse)	SMT Broadband LCT Filter (Feedthru)	SMT Broadband LCT Filter (Feedthru)	SMT High Current Broadband LCT Filter (High Current Feedthru Array)	SMT Bidirectional LCT Filter	SMT Bidirectional Transient Voltage Suppressors & EMI Filters (TransGuard)	Low Capacitance SMT Filters Arrays (MultiGuard)	SMT Bidirectional Transient Voltage Suppressors & EMI Filters (StaticGuard)	Low Capacitance LCT Transient Voltage Suppressor Filters (TransFeed)	Bidirectional Transient Voltage Suppressors (AntennaGuard)	Bidirectional Transient Voltage Suppressors for Medium & High Speed CAN Networks	Bidirectional Transient Voltage Suppressors for Low, Medium & High Speed CAN Networks (CAN BUS Series)	Bidirectional Transient Voltage Suppressors for Low Leakage CMOS Applications (UltraGuard)	Bidirectional Transient Voltage Suppressors for High Energy Transients (Medium Power MLY)	Bidirectional Transient Voltage Suppressors for Jump Start Auto Applications (Medium Power MLY)	Leadless Negative Temperature Coefficient Thermistors	SMT Negative Temperature Coefficient Thermistors	General Purpose Radial Leaded Power MOV (Metal Oxide Varistors)	
APPLICATIONS																			
ESD							X		X	X	X								
In Rush Current Limit																	X	X	
Long Wave Transient				X	X		X						X	X	X				X
EMI Filtering		X	X	X															
EMI Filtering + Transient				X	X	X	X	X	X	X	X	X	X	X	X				
Load Dump				X										X					
Automotive		X		X	X	X	X	X	X	X				X			X	X	
Mil Std 461-E				X															
ISO 7637				X										X					
IEC 61000				X	X	X	X	X	X	X	X	X	X						X
Telecom Protection				X											X				
Over Current Protection	X																		
Diode Replacement				X	X	X				X	X	X	X						
Zener Replacement				X	X	X				X	X	X	X						
Military A-A-55682				X															
Radiation Resistance				X	X														
Industrial		X		X	X	X	X			X	X		X				X		X
UL 1449																			X
UL 1414																			X
Medical (EN 60601)		X		X															
High Speed Data Line Protection									X		X								
Optic Transceiver Protection									X		X								
Temperature Sensing																	X	X	
Low Leakage Circuit												X							
DATA																			
Data Sheet	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Application Notes		X	X	X	X	X			X	X	X		X				X	X	X
Reliability Data		X			X														
Distributed Element Model					X	X	X	X	X	X	X	X	X	X					
Frequency Response		X	X	X	X	X	X	X	X	X			X						



Product Capability Chart



Circuit Protection & Signal Integrity

Fast Blow SMT Fuse (Surface Mount Fuse)



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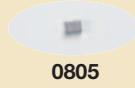


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1206

SMT Broadband LCT Filter (Feedthru)

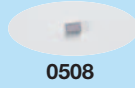


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SMT Broadband LCT Filter Array (Feedthru Array)



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SMT High Current Broadband LCT Filter (High Current Feedthru)



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SMT Bidirectional Transient Voltage Suppressors & EMI Filters (TransGuard)



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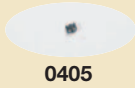


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SMT Bidirectional Transient Voltage Suppressors & EMI Filters Arrays (MultiGuard)



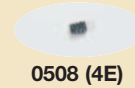
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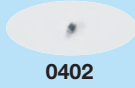


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0508 (4E)

Low Capacitance SMT Bidirectional Transient Voltage Suppressors & EMI Filters (StaticGuard)



0402



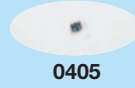
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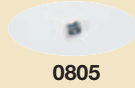


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SMT Bidirectional LCT Transient Voltage Suppressor Filters (TransFeed)

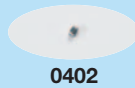


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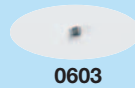


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Low Capacitance Bidirectional Transient Voltage Suppressors (AntennaGuard)

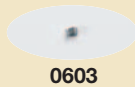


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Bidirectional Transient Voltage Suppressors for Low, Medium & High Speed CAN Networks (CAN BUS)



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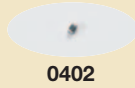


Product Capability Chart

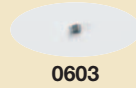


Circuit Protection & Signal Integrity

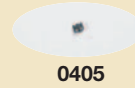
Bidirectional Transient Voltage Suppressors for USB Applications (USB Series)



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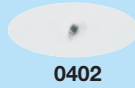


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Bidirectional Transient Voltage Suppressors for Low Leakage CMOS Applications (UltraGuard)



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Bidirectional Transient Voltage Suppressors for High Energy Transients (Medium Power MLV)



1206



1210



1812



2220

Bidirectional Transient Voltage Suppressors for Load Dump & Jump Start Auto Applications



1206



1210



1812



2220

Bidirectional Transient Voltage Suppressors for Telecom Applications (Medium Power MLV for Telecom)



1206



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2220

Leaded Negative Temperature Coefficient Thermistors



ND03



ND06

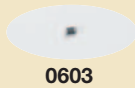


ND09

SMT Negative Temperature Coefficient Thermistors



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General Purpose Radial Leaded Power MOV (Metal Oxide Varistors)



VE07



VE09



VE13



VE17



VE24

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Fast Blow SMT Fuse (Surface Mount Fuse)

High accuracy, fast blow, surface mount fuses. Case sizes: 0402, 0603, 0805, 1206, 0612. Current ratings 250 mA to 5 Amps.

SMT Broadband LCT Filter (Feedthru)

Miniature surface mount broadband LC T configuration EMI filters. FeedThru current ratings to 300 mA.

SMT Broadband LCT Filter Array (Feedthru Array)

Miniature surface mount broadband 4 element LC T configuration EMI filter arrays. FeedThru current ratings of 300 mA.

SMT High Current Broadband LCT Filter (High Current Feedthru)

High current, surface mount, broadband LC T configuration filters. Feedthru currents up to 5 Amps.

SMT Bidirectional Transient Voltage Suppressors & EMI Filters (TransGuard)

Miniature surface mount, bidirectional transient voltage suppressor. Steady state operating voltages of 3.3 volts to 60 volts. Case sizes: 0402, 0603, 0805, 1206, 1210, 1812, 2220.

SMT Bidirectional Transient Voltage Suppressors & EMI Filter Arrays (MultiGuard)

Miniature surface mount bidirectional transient voltage suppressor 2 or 4 element arrays. Steady state operating voltages of 5.6 volts to 18 volts. Case sizes: 0405, 0508, 0612.

Low Capacitance SMT Bidirectional Transient Voltage Suppressors & EMI Filters (StaticGuard)

Bidirectional transient voltage suppressor intended for low leakage CMOS based IC protection. Can be operated at voltages up to 18V. Case sizes: 0402, 0405, 0508, 0603, 0612, 0805, 1206.

SMT Bidirectional LCT Transient Voltage Suppressor Filters (TransFeed)

Miniature bidirectional transient voltage suppressor filter LC T configuration. Relatively narrow band, high attenuation filter. Discrete filter in 0508 package, 4 element array filter in 0612 package.

Low Capacitance Bidirectional Transient Voltage Suppressors (AntennaGuard)

Low capacitance, bidirectional transient voltage suppressor intended for high speed or high frequency applications. Available in 0402 and 0603 case sizes. Capacitance values of 3 pF and 12 pF available.

Bidirectional Transient Voltage Suppressors for Low, Medium & High Speed CAN Networks (CAN BUS Series)

Bidirectional transient voltage suppressor intended for high speed and slow speed CAN circuitry. Available configurations: 0603 discrete, 0405 two element array, 0612 four element array.

Bidirectional Transient Voltage Suppressors for USB Applications (USB Series)

Bidirectional transient voltage suppressor intended for Universal Serial Bus applications. Available configurations: 0402 and 0603 discrete; 0405 two element array; 0508 three element array; 0612 four element array.

Bidirectional Transient Voltage Suppressors for Low Leakage CMOS Applications (UltraGuard)

Low leakage, bidirectional transient voltage suppressor intended for CMOS battery powered designs. Steady state operating voltages of 3, 5, 7, 10 and 15 volts (DC). Available configurations: 0402, 0603 and 0805 discrete; 0405 two element array; 0508 and 0612 four element array.

Bidirectional Transient Voltage Suppressors for High Energy Transients (Medium Power MLV)

Medium power, bidirectional transient voltage suppressor. Available in operating voltages of: 18, 26, 30, 48, 60 volts (DC). Case sizes: 1206, 1210, 1812, 2220. Energy ratings 0.9 to 1.5 joules.

Bidirectional Transient Voltage Suppressors for Load Dump & Jump Start Auto Applications (Medium Power Automotive Series)

Medium power, bidirectional transient voltage suppressor. Available in operating voltages of: 16 and 34 volts (DC). Case sizes: 1206, 1210, 1812, 2220. Energy ratings 0.6 to 12 joules. Load dump and jump start rated.

Bidirectional Transient Voltage Suppressors for Telecom Applications (Medium Power MLV for Telecom)

Medium power, bidirectional transient voltage suppressor. Available in operating voltages of: 60 and 90 Vrms in 1812 case size. Energy ratings of 5 and 6 joules. CCITT 10x700µs 2kV capable.

Leaded Negative Temperature Coefficient Thermistors

Negative temperature coefficient thermistors high accuracy NTCs from 2k ohm to 100k ohm, general purpose NTCs from 10 ohms to 1 meg ohm, inrush current limiters from 1 ohm to 120 ohms. Stud mounted NTCs from 10 ohms to 330 k ohms.

SMT Negative Temperature Coefficient Thermistors

Surface mount negative temperature coefficient thermistor in 0402, 0603, 0805 and 1206 case sizes.

General Purpose Radial Leaded Power MOV (Metal Oxide Varistors)

Radial Metal Oxide varistors 11 Vrms to 625 Vrms. Energy ratings to >500 J. Peak current ratings to 10,000 A.

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