

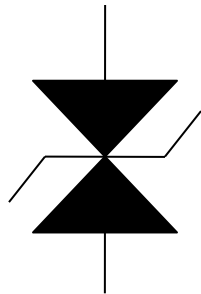
AVX Auto Series Varistors

Auto Grade Zinc Oxide Multi Layer Varistor (MLV)

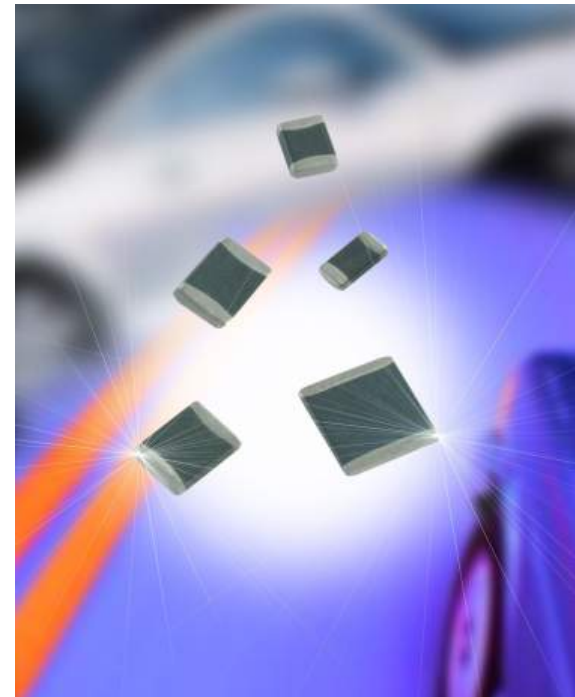
16v,18v, 26v, 30v, 38v, 42v, 48v, 56v, 85v DC Ratings

0402 to 1210 case size options

RoHS compliant



Schematic Symbol



AVX Auto Series Varistor Features

- High Reliability
- Load Dump and Jump start capability
- High Current Handling capability
- AEC Q200 Qualified
- Bi-Directional protection
- Off State EMI/RFI attenuation
- Multi-strike capability
- Sub 1nS response turn on time

AVX Auto Series Varistors Product Information

AVX Part Number	Working Voltage (DC)	Working Voltage (AC)	V _B	V _C	Test Current for V _C	Maximum I _L	E _T	I _P	Typical Cap	Freq	V _{Jump}	P _{Diss, Max}
VCAS060316B400__	16	11	25.5±10%	42	1	10	0.2	30	150	K	24.5	0.003
VCAS120616K380__	16	11	22.0±10%	38	1	15	0.6	200	930	K	27.5	0.010
VCAS121016J390__	16	11	25.5±10%	42	5	10	1.5	500	3100	K	27.5	0.030
VCAS040218X400__	18	13	25.5±10%	42	1	10	0.05	20	65	M	24.5	0.001
VCAS060318A400__	18	13	25.5±10%	42	1	10	0.1	30	150	K	24.5	0.003
VCAS080518A400__	18	13	25.5±10%	42	1	10	0.1	30	225	K	27.5	0.002
VCAS080518C400__	18	13	25.5±10%	42	1	10	0.3	120	550	K	27.5	0.007
VCAS120618A400__	18	13	25.5±10%	42	1	10	0.1	30	350	K	27.5	0.002
VCAS120618D400__	18	13	25.5±10%	42	1	10	0.4	150	900	K	27.5	0.008
VCAS120618E380__	18	13	22.0±10%	38	1	15	0.5	200	930	K	27.5	0.010
VCAS121018J390__	18	13	25.5±10%	42	5	10	1.5	500	3100	K	27.5	0.030
VCAS060326A580__	26	18	34.5±10%	60	1	10	0.1	30	155	K	27.5	0.002
VCAS080526A580__	26	18	34.5±10%	60	1	10	0.1	30	120	K	27.5	0.002
VCAS080526C580__	26	18	34.5±10%	60	1	10	0.3	100	250	K	27.5	0.006
VCAS120626D580__	26	18	34.5±10%	60	1	10	0.4	120	500	K	27.5	0.008
VCAS121026H560__	26	18	34.5±10%	60	5	10	1.2	300	2150	K	27.5	0.018

AVX Auto Series Varistors Product Information

Commercial Voltage Range:

AVX Part Number	Working Voltage (DC)	Working Voltage (AC)	V _B	V _C	Test Current for V _C	Maximum I _L	E _T	I _P	Typical Cap	Freq	V _{Jump}	P _{Diss, Max}
VCAS060330A650_ _	30	21	41.0±10%	67	1	10	0.1	30	125	K	29.0	0.002
VCAS080530A650_ _	30	21	41.0±10%	67	1	10	0.1	30	90	M	29.0	0.002
VCAS080530C650_ _	30	21	41.0±10%	67	1	10	0.3	30	250	K	29.0	0.005
VCAS120630D650_ _	30	21	41.0±10%	67	1	10	0.4	120	400	K	29.0	0.008
VCAS121030H620_ _	30	21	41.0±10%	67	5	10	1.2	280	1850	K	29.0	0.018
VCAS080538C770_ _	38	30	47.0±10%	77	1	10	0.3	80	200	K	45.0	0.006
VCAS120642L800_ _	42	32	51.0±10%	80	1	100	0.8	180	600	K	48.0	0.016
VCAS120648D101_ _	48	34	62.0±10%	100	1	10	0.4	100	225	K	48.0	0.008
VCAS121048H101_ _	48	34	62.0±10%	100	1	10	1.2	250	500	K	48.0	0.022
VCAS120656F111_ _	56	40	68.0±10%	110	1	15	0.7	100	180	K	48.0	0.014
VCAS121085S151_ _	85	60	100.0±10%	150	1	35	2.0	250	275	K	48.0	0.040

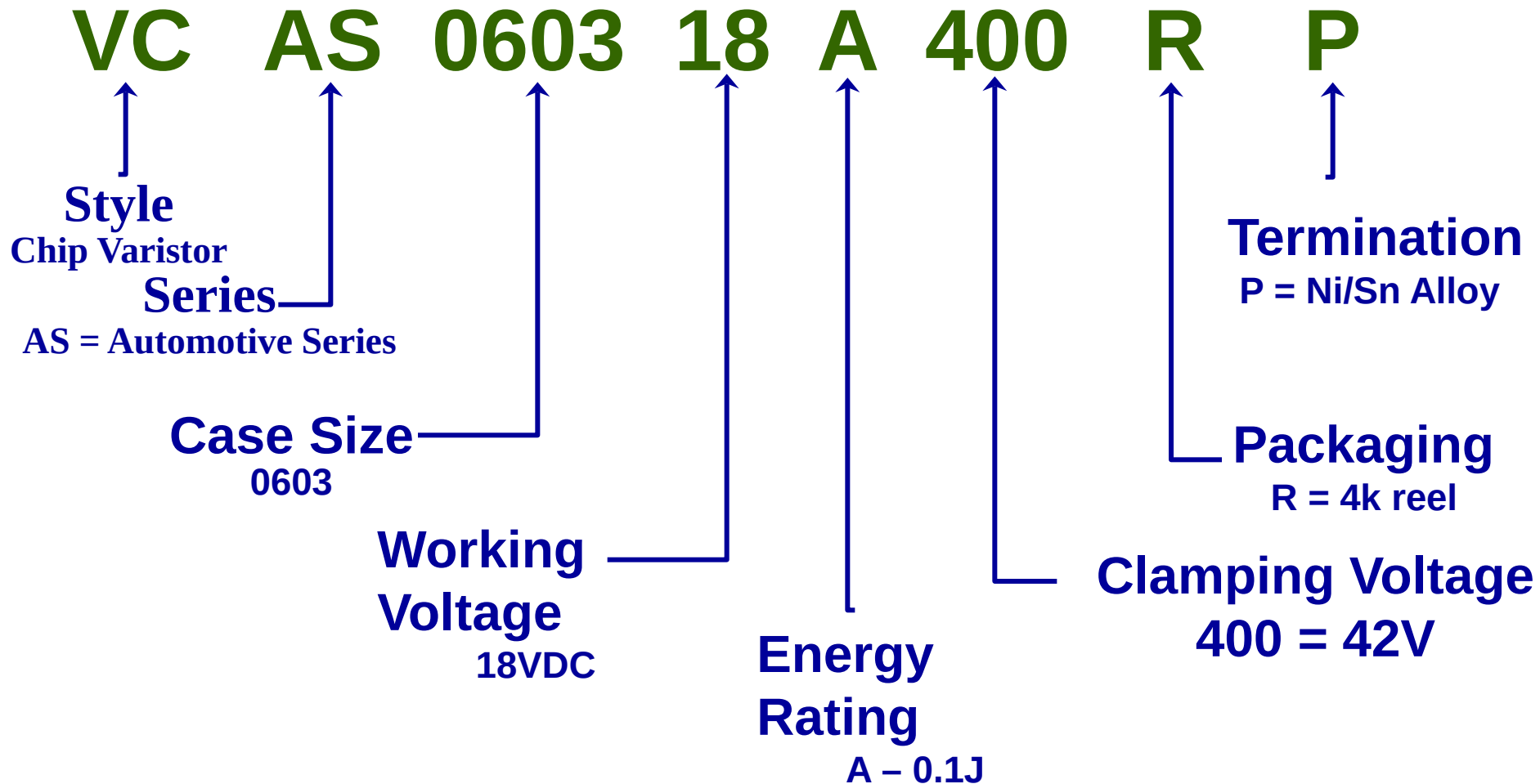
Load Dump / Jump Start Ratings

AVX Part Number	Working Voltage (DC)	Working Voltage (AC)	Transient Energy 10 x 1000 us (Joules)	Load Dump Energy (x10) Joules	Typical Vz Max Versus Pulse duration and Rs	
					0.5 Ohm 100 mS	4 Ohm 100 mS
VCAS060316B400__	16	11	0.2	0.25	35	40
VCAS120616K380__	16	11	0.6	1.5	40	55
VCAS121016J390__	16	11	1.5	3	45	65
VCAS040218X400__	18	13	0.05	0.05	30	35
VCAS060318A400__	18	13	0.1	0.1	30	35
VCAS080518A400__	18	13	0.1	0.1	35	40
VCAS080518C400__	18	13	0.3	1	35	45
VCAS120618A400__	18	13	0.1	0.5	40	50
VCAS120618D400__	18	13	0.4	1.5	40	55
VCAS120618E380__	18	13	0.5	1.5	40	55
VCAS121018J390__	18	13	1.5	3	45	65

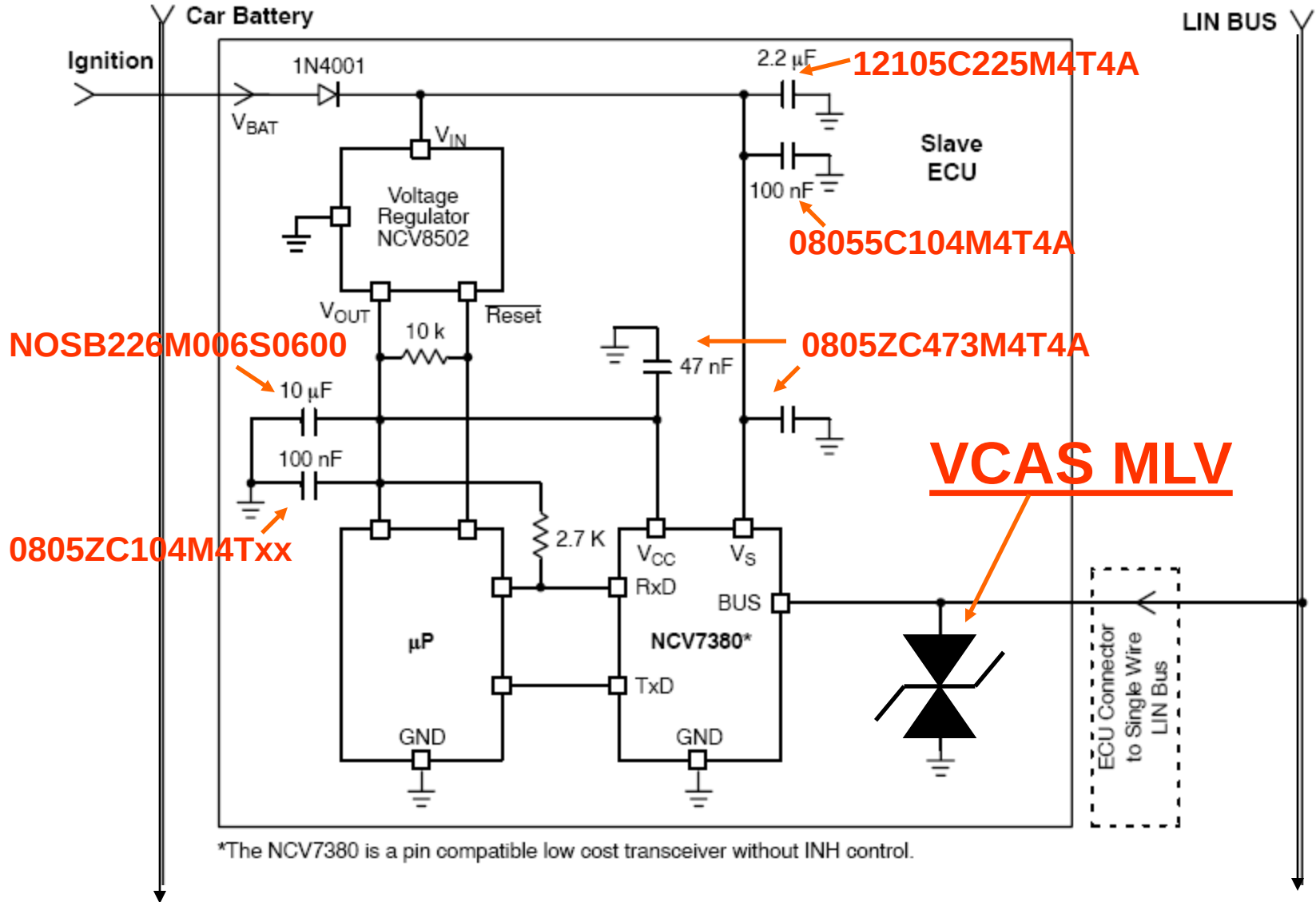
AVX Part Number	Working Voltage (DC)	Working Voltage (AC)	Transient Energy 10 x 1000 us (Joules)	Load Dump Energy (x10) Joules	Typical Vz Max Versus Pulse duration and Rs	
					1 Ohm 100 mS	8 Ohm 100 mS
VCAS060326A580__	26	18	0.1	0.1	45	50
VCAS080526A580__	26	18	0.1	0.15	50	55
VCAS080526C580__	26	18	0.3	0.5	50	60
VCAS120626D580__	26	18	0.4	1	50	60
VCAS121026H560__	26	18	1.2	3	55	80
VCAS060330A650__	30	21	0.1	0.15	50	60
VCAS080530A650__	30	21	0.1	0.15	50	60
VCAS080530C650__	30	21	0.3	0.5	55	65
VCAS120630D650__	30	21	0.4	1	60	70
VCAS121030H620__	30	21	1.2	3	60	90

Automotive Series

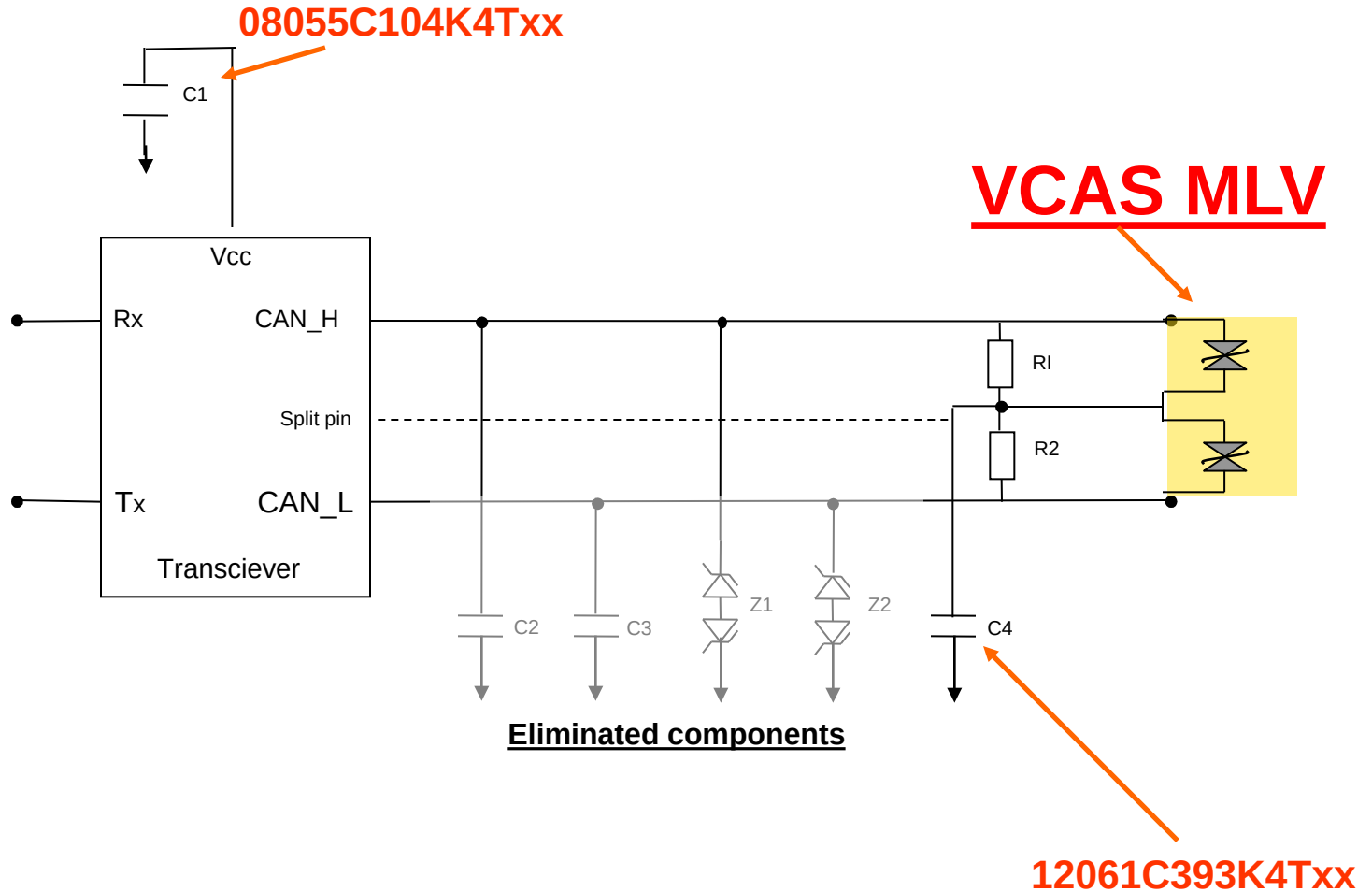
Part Number



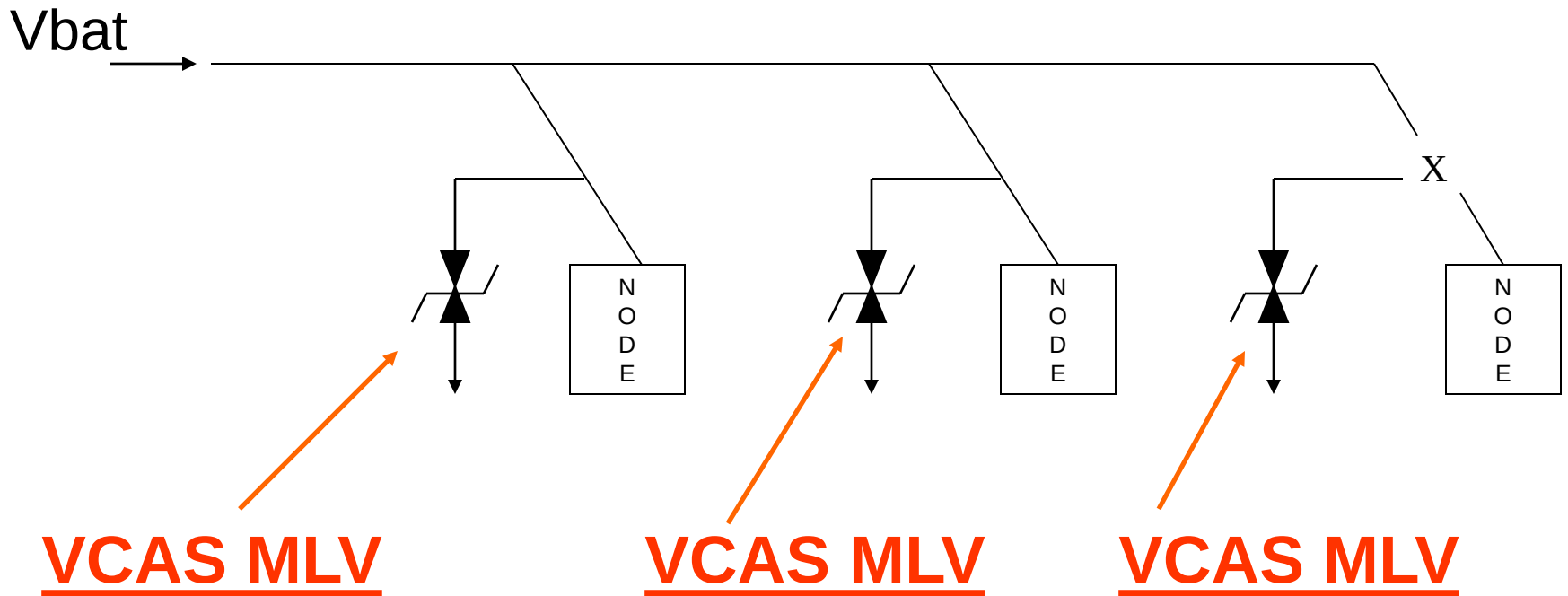
AVX LIN Bus Protection



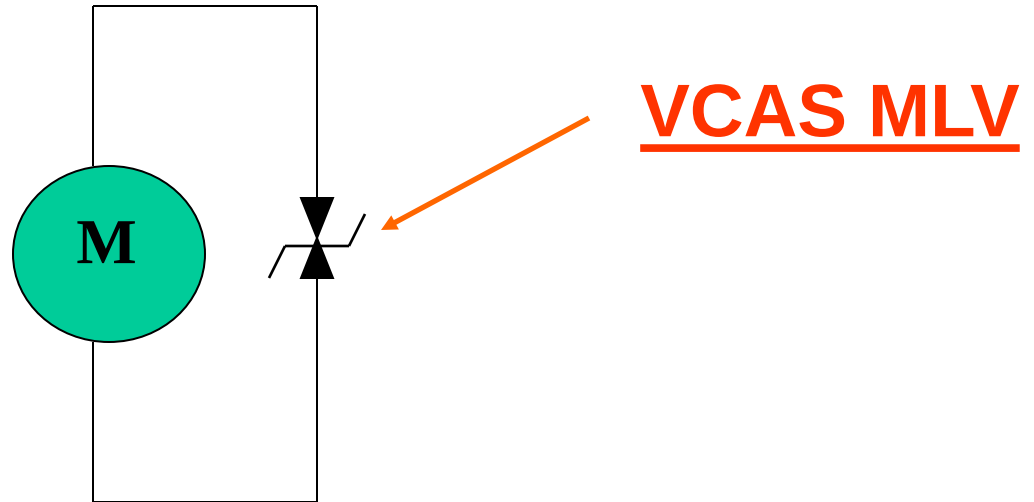
AVX CAN Bus ESD Protection



Module Vcc Protection



Inductive turn off protection



Automotive Series Summary

Features and Benefits

- Process Change Notice (PCN) controlled
- High energy and current handling capability
- Low Leakage current specifications
- Bi-directional ESD protection in on-state
- EMI/RFI attenuation in off-state
- Sub 1nS response time
- AEC Q200 qualified
- Load Dump and Jump Start Capable
- Meet IEC 61000-4-2 ESD requirements