

### Description

The OV Series varistor/suppressor is a dual function device that protects against transient voltages and radio-frequency noise generated within 12V<sub>DC</sub> and 24 V<sub>DC</sub> vehicle power systems. This component replaces two components: a low voltage varistor and a capacitor.



The OV Series incorporates a varistor function in automotive applications and a radio-frequency filter operating in the capacitance range from 0.47µF to 1.5µF. These components are designed for protection of all sensitive electronics circuits from both voltage transients and high-frequency noise produced by electromechanical devices such as relays, electric motors, etc.

OV varistors/suppressors are square-shaped components with in-line leads, which require at least 30% less mounting space than the two components they replace.

### Features

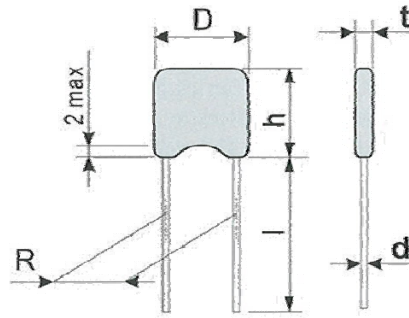
- AC operating voltage (Vrms) from 14V to 40V
- DC operating voltage (Vdc) from 16V to 56V
- Power supply voltages (Vdc) 12V and 24V
- Capacitance range (µF) 0.47 to 1.5
- Available with straight or crimped leads
- Capacitor temperature characteristics Z5U/Y5V
- Dimensional and weight savings on PC board
- 2 model sizes available 7.3 x 9.0 and 7.8 x 12mm
- In-line leads
- Protects against voltage transients and suppresses, radio-frequency interference

General Technical Data		
Operating Ambient Temperature	-40°C to +85°C	In accordance with CECC 42 000
Storage Temperature Range	-40°C to +125°C	In accordance with CECC 42 000
Isolation Voltage Capability	> 1kV	
Threshold Voltage Temperature Coefficient	< -0.05%/°C	
Insulation Resistance	> 1Gohm	
Response Time	< 25ns	

Standard Packaging Options / Quantities					
Series	Voltage Range (Vrms)	Current Code	Packaging Options		
			B = Bulk	R = Reel	A = Ammo Pack
OV	14 - 40	801	1,500	1,500	1,500
		122			

### How to Order

Type	Lead Style	Vrms	V <sub>N</sub> Tolerance	Capacitance Value	Capacitance Tolerance	Dielectric Material	Surge Current	Packaging		
<b>OV</b>	<b>1</b>	<b>20</b>	<b>K</b>	<b>105</b>	<b>M</b>	<b>Z</b>	<b>122</b>	<b>R</b>		
Type	Max. surge: Current Code	Version	Code	Tolerance	Value	Code	Tolerance	Code	Code	Description
OV	801 = 800 Amps	1 = Straight Leads	K	10%	474 0.47µF	M	20	Z stands for Z5U/Y5V	B	Bulk
	122 = 1,200 Amps				105 1.0µF				R	Reel
					155 1.5µF				A	Ammo Pack



### Device Ratings and Dimensions

Part Number	$V_{RMS}$	$V_{DC}$	$V_N$	$V_{JUMP}$	$V_C$	$I_C$	$W_{MAX}$	$W_{LDX}$	$P_{MAX}$	$I_P$	$C_{TYP}$	$D_{MAX}$	$h/A_{MAX}$	$R$	$d$	$t_{MAX}$
	(volts)	(volts)	(volts)	(volts)	(volts)	(amps)	(joules)	(joules)	(watts)	(amps)	(nF)	(mm)	(mm)	(mm)	(mm)	(mm)
12V Supply Voltage																
OV 14 K 474 MZ 801	14	16	24	24.5	40	5	2.4	6	0.015	800	0.47	7.5	9	5	0.6	5.5
OV 14 K 105 MZ 801	14	16	24	24.5	40	5	2.4	6	0.015	800	1.00	7.5	9	5	0.6	5.5
OV 14 K 155 MZ 801	14	16	24	24.5	40	5	2.4	6	0.015	800	1.50	7.5	9	5	0.6	5.5
OV 14 K 474 MZ 122	14	16	24	24.5	40	10	5.8	12	0.030	1,200	0.47	8	12	5	0.6	5.5
OV 14 K 105 MZ 122	14	16	24	24.5	40	10	5.8	12	0.030	1,200	1.00	8	12	5	0.6	5.5
OV 14 K 155 MZ 122	14	16	24	24.5	40	10	5.8	12	0.030	1,200	1.50	8	12	5	0.6	5.5
OV 17 K 474 MZ 801	17	20	27	30	44	5	2.8	6	0.015	800	0.47	7.5	9	5	0.6	5.5
OV 17 K 105 MZ 801	17	20	27	30	44	5	2.8	6	0.015	800	1.00	7.5	9	5	0.6	5.5
OV 17 K 155 MZ 801	17	20	27	30	44	5	2.8	6	0.015	800	1.50	7.5	9	5	0.6	5.5
OV 17 K 474 MZ 122	17	20	27	30	44	10	7.4	12	0.030	1,200	0.47	8	12	5	0.6	5.5
OV 17 K 105 MZ 122	17	20	27	30	44	10	7.4	12	0.030	1,200	1.00	8	12	5	0.6	5.5
OV 17 K 155 MZ 122	17	20	27	30	44	10	7.4	12	0.030	1,200	1.50	8	12	5	0.6	5.5
24V Supply Voltage																
OV 20 K 474 MZ 801	20	26	33	36	54	5	3.2	6	0.015	800	0.47	7.5	9	5	0.6	5.5
OV 20 K 105 MZ 801	20	26	33	36	54	5	3.2	6	0.015	800	1.00	7.5	9	5	0.6	5.5
OV 20 K 155 MZ 801	20	26	33	36	54	5	3.2	6	0.015	800	1.50	7.5	9	5	0.6	5.5
OV 20 K 474 MZ 122	20	26	33	36	54	10	7.8	12	0.030	1,200	0.47	8	12	5	0.6	5.5
OV 20 K 105 MZ 122	20	26	33	36	54	10	7.8	12	0.030	1,200	1.00	8	12	5	0.6	5.5
OV 20 K 155 MZ 122	20	26	33	36	54	10	7.8	12	0.030	1,200	1.50	8	12	5	0.6	5.5
OV 30 K 474 MZ 801	30	38	47	50	77	5	4.5	6	0.015	800	0.47	7.5	9	5	0.6	5.5
OV 30 K 105 MZ 801	30	38	47	50	77	5	4.5	6	0.015	800	1.00	7.5	9	5	0.6	5.5
OV 30 K 155 MZ 801	30	38	47	50	77	5	4.5	6	0.015	800	1.50	7.5	9	5	0.6	5.5
OV 30 K 474 MZ 122	30	38	47	50	77	10	10	12	0.030	1,200	0.47	8	12	5	0.6	5.5
OV 30 K 105 MZ 122	30	38	47	50	77	10	10	12	0.030	1,200	1.00	8	12	5	0.6	5.5
OV 30 K 155 MZ 122	30	38	47	50	77	10	10	12	0.030	1,200	1.50	8	12	5	0.6	5.5
42V Supply Voltage																
OV 40 K 474 MZ 801	40	56	68	65	110	5	5.0	6	0.015	800	0.47	7.5	9	5	0.6	5.5
OV 40 K 105 MZ 801	40	56	68	65	110	5	5.0	6	0.015	800	1.00	7.5	9	5	0.6	5.5
OV 40 K 155 MZ 801	40	56	68	65	110	5	5.0	6	0.015	800	1.50	7.5	9	5	0.6	5.5
OV 40 K 474 MZ 122	40	56	68	65	110	10	10.5	12	0.030	1,200	0.47	8	12	5	0.6	5.5
OV 40 K 105 MZ 122	40	56	68	65	110	10	10.5	12	0.030	1,200	1.00	8	12	5	0.6	5.5
OV 40 K 155 MZ 122	40	56	68	65	110	10	10.5	12	0.030	1,200	1.50	8	12	5	0.6	5.5