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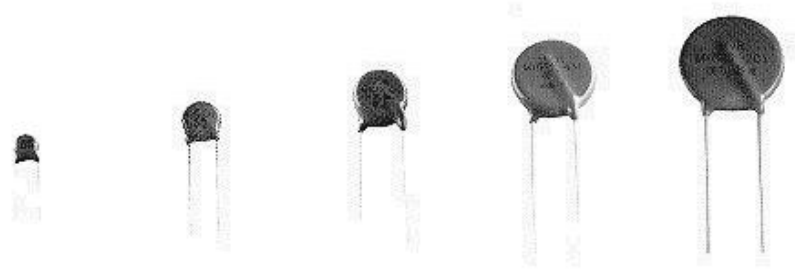
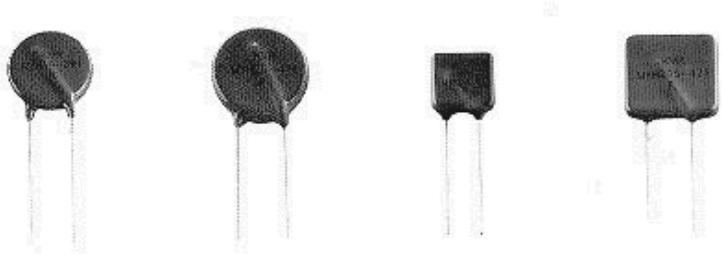
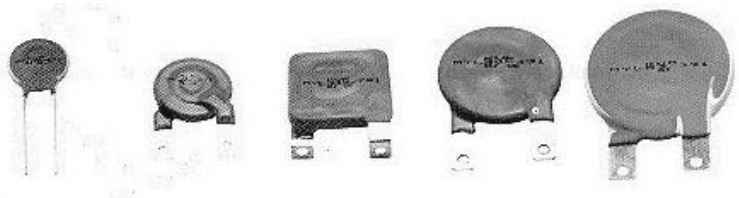
Metal oxide varistors catalogue



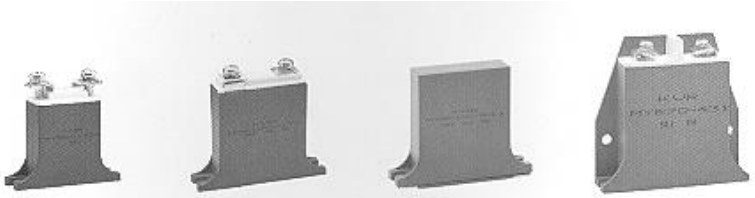
SMYG General Series	D05	D07	D10	D14	D20
Max Energy Absorption W_{MAX} (J)	0,3~18	0,8~32	1,7~110	3,2~360	10~720
Peak Current (8/20μs) I_{MAX} (kA)	0,1~0,8	0,25~1,75	0,5~3,5	1,0~6,0	2,0~10,0
MOV Diameter (mm)	5	7	10	14	20
Varistor Voltage V_N (V)	18~750	18~750	18~1800	18~1800	18~1800
Max Power Rating P_{MAX} (W)	0,01~0,1	0,02~0,25	0,05~0,4	0,1~0,6	0,2~1,0



SMYH High Performance Series	D14	D20	Q14	Q20
Max Energy Absorption W_{MAX} (J)	45~130	90~220	75~185	100~255
Peak Current (8/20μs) I_{MAX} (kA)	8,0	12,0	8,0	15,0
MOV Diameter (mm)	14	20	14*14	20*20
Varistor Voltage V_N (V)	200~510	200~510	200~510	200~510
Max Power Rating P_{MAX} (W)	0,6	1,0	0,6	1,0



SMYL Lightning Protection Series	D25	D32	Q34	D40	D53
Max Energy Absorption W_{MAX} (J)	150~725	210~900	310~1400	310~1400	490~2278
Peak Current (8/20μs) I_{MAX} (kA)	15	25	40	40	70
MOV Diameter (mm)	25	32	34*34	40	53
Varistor Voltage V_N (V)	200~1600	200~1600	200~1600	200~1800	200~1600
Max Power Rating P_{MAX} (W)	1,0	1,2	1,4	1,4	1,5



SMYE High Duty Series	E20	E30	E40	E70
Max Energy Absorption W_{MAX} (J)	150~525	210~760	310~1100	490~1800
Peak Current (8/20μs) I_{MAX} (kA)	20	30	40	70
MOV Diameter (mm)	25	32	34*34	60
Varistor Voltage V_N (V)	200~1200	200~1200	200~1200	200~4700
Max Power Rating P_{MAX} (W)	1,0	1,2	1,4	1,6

SMYP High Energy Disc Varistor Series	Q34	D32	D40	D53
Max Energy Absorption W_{MAX} (J)	310~1400	210~900	310~1400	490~2278
Peak Current (8/20μs) I_{MAX} (kA)	40	25	40	70
MOV Diameter (mm)	34*34	32	40	53
Varistor Voltage V_N (V)	200~1600	200~1600	200~1600	200~1600
Max Power Rating P_{MAX} (W)	1,4	1,2	1,4	1,5

SPA series	D20
Max Energy Absorption W_{MAX} (J)	40~720
Peak Current (8/20μs) I_{MAX} (kA)	10
MOV Diameter (mm)	20
Varistor Voltage V_N (V)	82~1800
Max Power Rating P_{MAX} (W)	1,0

STMOV Thermo Cutoff Series	D20	D25	D32
Max Energy Absorption W_{MAX} (J)	40~440	150~525	220~760
Peak Current (8/20μs) I_{MAX} (kA)	8	12	20
MOV Diameter (mm)	20	25	32
Varistor Voltage V_N (V)	82~1100	200~1100	200~1100
Max Power Rating P_{MAX} (W)	1,0	1,0	1,2

SMYG series

Products Description

SMYG varistors are designed for electronic circuit, which has standard electrode lead mounted with PCB. With excellent surge protection ability, it is widely used in various fields of electric technology and electronic products, such as computer, power supply, household appliance, telecommunication, network and automobile, etc.

Construction and Features

- Construction: Round varistors element, leaded and coated;
- Coating materials: Epoxy resin, flame retardant to UL94V-0;
- Terminals: Tinned copper wire;
- Package: Bulk, Reel or Ammopack

Approvals

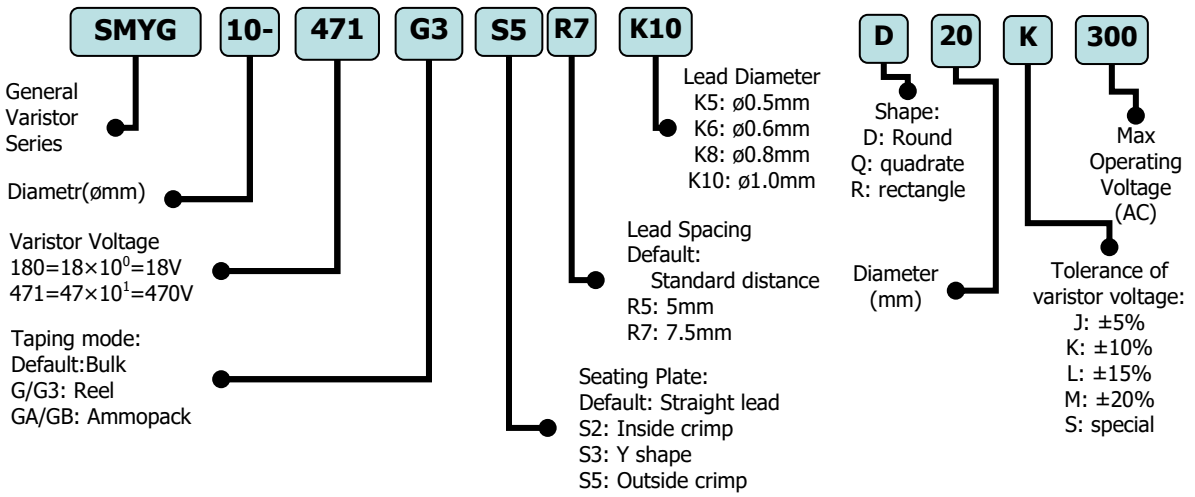
With safety certifications of UL, VDE, CSA, CE, etc.

Key Characteristic Parameters:

Max AC Operating Voltage V_{RMS} (V)	**11~1000**
Max Energy Absorption W_{MAX} (J)	**0,3~720**
Peak Current I_{MAX} (kA)	**0,1~10**
MOV Diameter D(mm)	**5~20**

Technical Data:

Characteristics	Parameters	Standards
Climatic Category **LCT** **UCT**	**40/85/56** **-40°C** **+85°C**	**IEC68 – 2 – 3**
Operating Temperature	**-40°C~+85°C**	**CECC 42 000**
Storage Temperature	**-40°C~+125°C**	
Electric Strength	**≥ 2500V(AC)**	**CECC 42 000**
Insulation Resistance	**≥ 10MΩ**	**CECC 42 000**
Response Time	**<25 ns**	



SMYH series

Products Description

SMYH varistors are designed for electronic circuit for high surge with standing capacity, which have standard electrode with PCB. With the same product dimensions, it can handle greater surge than SMYG series. It is widely used in various fields of computer, power supply, communication, network, railway, generator control, etc.

Construction and Features

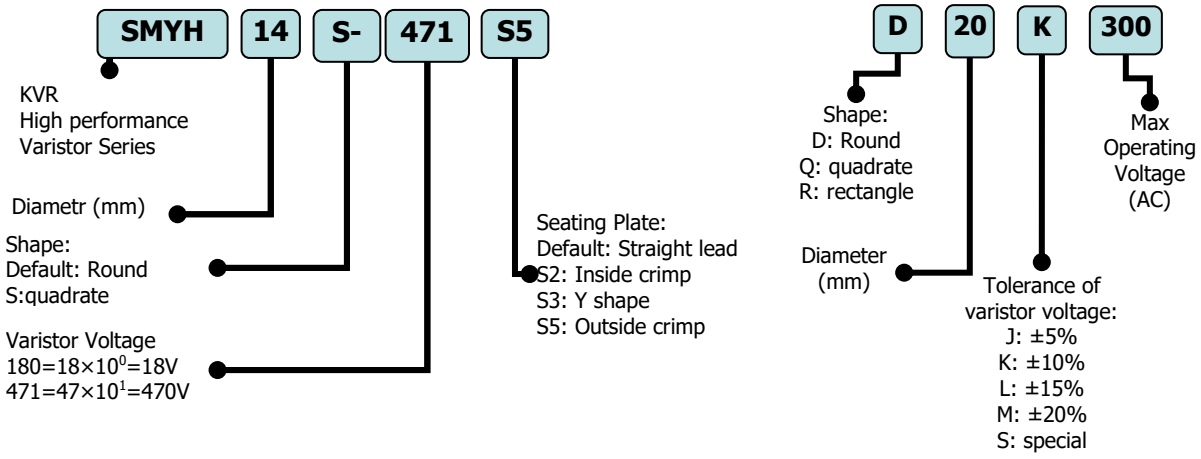
- Construction: Round or quadrate varistors element, Leaded and coated;
- Coating materials: Epoxy resin, flame retardant to UL94V-0;
- Terminals: Tinned copper wire;
- Package: Bulk, Reel or Ammopack

Key Characteristic Parameters:

Max AC Operating Voltage V_{RMS} (V)	**130~320**
Max Energy Absorption W_{MAX} (J)	**45~255**
Peak Current I_{MAX} (kA)	**8~15**
MOV Diameter D(mm)	**14~20**

Technical Data:

Characteristics	Parameters	Standards
Climatic Category **LCT** **UCT**	**40/85/56** **-40°C** **+85°C**	**IEC68 – 2 – 3**
Operating Temperature	**-40°C~+85°C**	**CECC 42 000**
Storage Temperature	**-40°C~+125°C**	
Electric Strength	**≥ 2500V(AC)**	**CECC 42 000**
Insulation Resistance	**≥ 10MΩ**	**CECC 42 000**
Response Time	**<25 ns**	



SMYE series

Products Description

SMYE varistors are designed for heavy industrial electric products of extremely high demand on surge withstanding capacity, as well as poor working environments. They are made of big diameter ZnO varistor and non-flammable housing, sealing with non-flammable, insulating and explosion protection material. SMYE can provide excellent surge protection capacity. With reliable terminals, it is widely used in automatic industrial equipments, power supply control, electric power transmission, communication equipments, mining equipments, railway signal sytem, etc.

Construction and Features

- Construction: High strength terminal MOV potted in non-flammable housing;
- Potting materials: Potting with non-flammable, insulation and explosion protection potting resin-retardant to UL94 V-0;
- Terminals: Tin-plated copper plate;
- Package: Box

Approvals

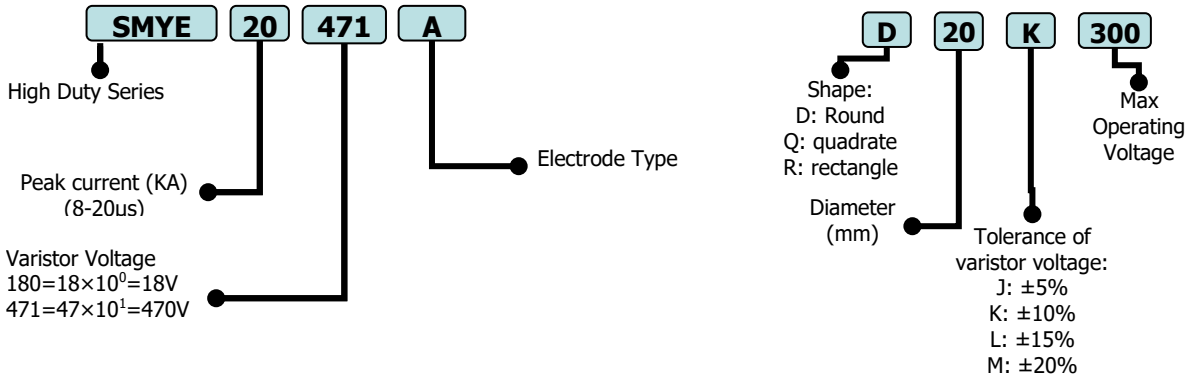
With safety certifications of UL, VDE, CSA, CE, etc.

Key Characteristic Parameters:

Max AC Operating Voltage V_{RMS} (V)	**130~2800**
Max Energy Absorption W_{MAX} (J)	**180~10000**
Peak Current I_{MAX} (kA)	**20~70**
MOV Diameter D(mm)	**25~60**

Technical Data:

Characteristics	Parameters	Standards
Climatic Category **LCT** **UCT**	**40/85/56** **-40°C** **+85°C**	**IEC68 – 2 – 3**
Operating Temperature	**-25°C~+85°C**	**CECC 42 000**
Storage Temperature	**-25°C~+110°C**	
Electric Strength	**≥ 2500V(AC)**	**CECC 42 000**
Insulation Resistance	**≥ 10MΩ**	**CECC 42 000**
Response Time	**<25 ns**	



SMYL series

Products Description

SMYL varistors are designed for heavy industrial electric products of extremely high demand on surge withstanding capacity. Providing excellent surge protection performance. The terminals are tinned copper wire of plate. It is widely used in building outdoor leading-in wires (such as: switchboard), mining, petrolatum equipments, power transmission, telecommunication, networks, railway, motor control, etc.

Construction and Features

- Construction: Round or quadrate varistors element, Leaded and coated;
- Coating materials: Epoxy resin, flame retardant to UL94V-0;
- Terminals: Tinned copper wire or plate;
- Package: Box

Approvals

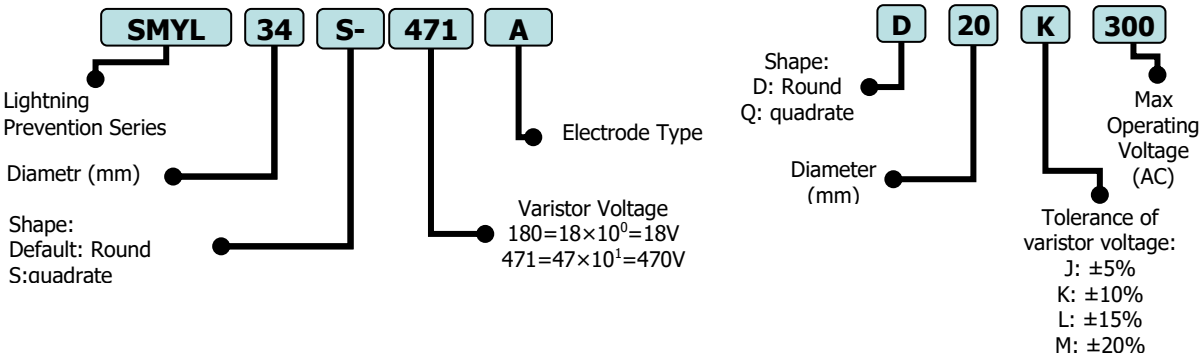
With safety certifications of UL, CE, etc.

Key Characteristic Parameters:

Max AC Operating Voltage V_{RMS} (V)	**130~1000**
Max Energy Absorption W_{MAX} (J)	**150~2278**
Peak Current I_{MAX} (kA)	**15~70**
MOV Diameter D(mm)	**25~53**

Technical Data:

Characteristics	Parameters	Standards
Climatic Category **LCT** **UCT**	**40/85/56** **-40°C** **+85°C**	**IEC68 – 2 – 3**
Operating Temperature	**-40°C~+85°C**	**CECC 42 000**
Storage Temperature	**-40°C~+110°C**	
Electric Strength	**≥ 2500V(AC)**	**CECC 42 000**
Insulation Resistance	**≥ 10MΩ**	**CECC 42 000**
Response Time	**<25 ns**	



SMYP series

Products Description

SMYP varistors are designed for extremely high demand on surge withstanding capacity,which would be assembled by the customer themselves. SMYP varistors surfaces are screen printed with silver paste. It is good solderability after burn-in. With excellent surge protection performance, it is widely used in various fields of computer, power supply control, power transmission, communication equipments, mining equipments, railway signal system, etc.

Construction and Features

- Construction: Round or quadrate metallized varistors element;
- Terminals: Silver printed on surface, no terminals;
- Package: Box

Approvals

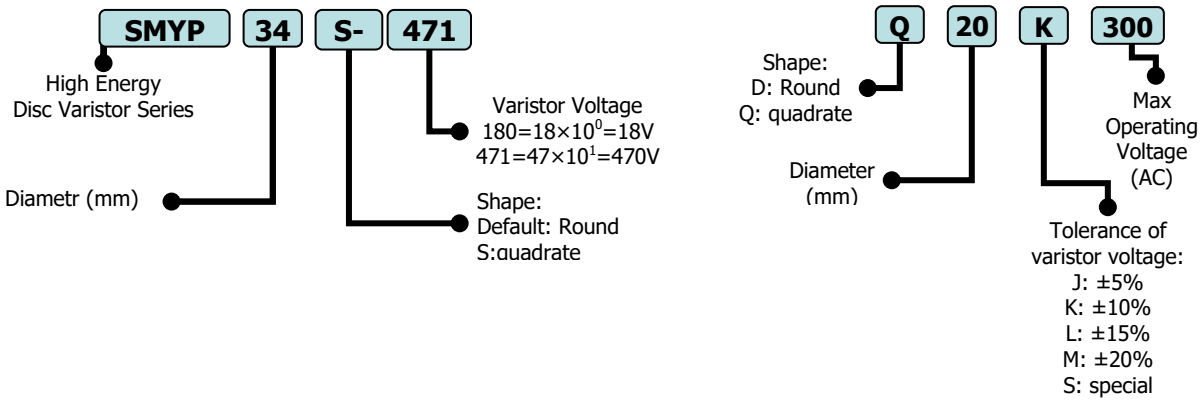
With safety certifications of UL.

Key Characteristic Parameters:

Max AC Operating Voltage V_{RMS} (V)	**130~900**
Max Energy Absorption W_{MAX} (J)	**320~2278**
Peak Current I_{MAX} (kA)	**25~70**
MOV Diameter D(mm)	**32~53**

Technical Data:

Characteristics	Parameters	Standards
Climatic Category **LCT** **UCT**	**25/85/56** **-40°C** **+85°C**	**IEC68 – 2 – 3**
Operating Temperature	**-40°C~+85°C**	**CECC 42 000**
Storage Temperature	**-40°C~+110°C**	
Electric Strength	**≥ 2500V(AC)**	**CECC 42 000**
Insulation Resistance	**≥ 10MΩ**	**CECC 42 000**
Response Time	**<25 ns**	



SPA series

Products Description

Designed with reliable installation and flat electrodes of good heatexchange, SPA varistors can be installed in situations with strong vibration or industrial electronic products with high power consumption. Flat electrodes are soldered with metallied disc, and potted in Bakelite housing with non-flammable and isulating material. It is widely used in industrial automatic control equipment, power supply control, water supply system, petrolatum equipments, mining equipment, power supply control, water supply system, petrolatum equipments, mining equipments, railway signal system, etc.

Construction and Features

- Construction: Flat electrode oldered with metallised disc potted and potting in bakelite housing;
- Potting materials: Potting with non-flamable, insulation and explosion protection potting resin-retardant to UL 94 V-0;
- Terminals: Tinned copper plate;
- Package: Box

Approvals

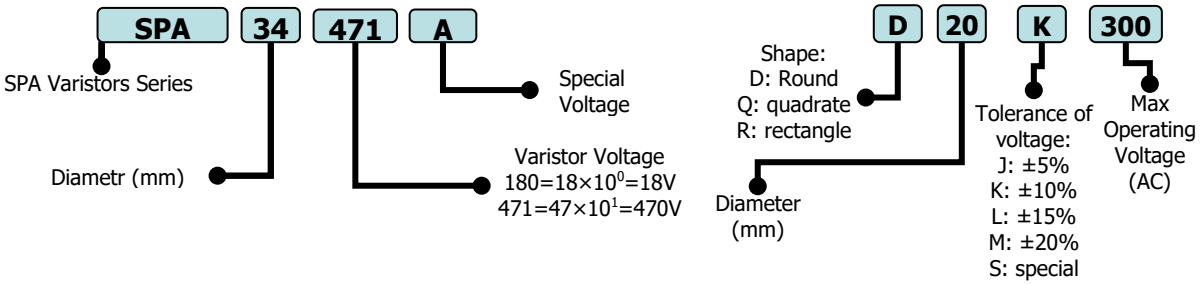
With safety certifications of UL.

Key Characteristic Parameters:

Max AC Operating Voltage V_{RMS} (V)	**50~1000**
Max Energy Absorption W_{MAX} (J)	**40~720**
Peak Current I_{MAX} (kA)	**10**
MOV Diameter D(mm)	**20**

Technical Data:

Characteristics	Parameters	Standards
Climatic Category **LCT** **UCT**	**40/85/56** **-40°C** **+85°C**	**IEC68 – 2 – 3**
Operating Temperature	**-40°C~+85°C**	**CECC 42 000**
Storage Temperature	**-40°C~+110°C**	
Electric Strength	**≥ 2500V(AC)**	**CECC 42 000**
Insulation Resistance	**≥ 10MΩ**	**CECC 42 000**
Response Time	**<25 ns**	



STMOV series

Products Description

STMOV temperature fuse varistor is a type with over temperature cut-off functions. A temperature fuse is connected with MOV in series. When the operating current increasing continuously or MOV failue, the temperature fuse will be cut-off because of temperatuer over the limit. Which make the currentto MOV cut-off, and the temperature of MOV would not increase further, therebyprevent from fires caused by MOV failure. It adopts standard leads as outlet terminals, very suitable to be installed on PCBs. STMOV can be widely used in computer switching power supply, power socket, UPS, telecommunication, network, railway, etc.

Construction and Features

- Construction: Round vaistors element, connected with a temperature fuse, leaded and coated;
- Coating materials: Epoxy resin, flame retardant to UL94V-0;
- Terminals: Tinned copper wire;
- Package: Bulk

Key Characteristic Parameters:

Max AC Operating Voltage V_{RMS} (V)	**50~680**
Max Energy Absorption W_{MAX} (J)	**40~760**
Peak Current I_{MAX} (kA)	**8~20**
MOV Diameter D(mm)	**20~32**

Technical Data:

Characteristics	Parameters	Standards
Climatic Category **LCT** **UCT**	**40/85/56** **-40°C** **+85°C**	**IEC68 – 2 – 3**
Operating Temperature	**-40°C~+85°C**	**CECC 42 000**
Storage Temperature	**-40°C~+110°C**	
Electric Strength	**≥ 2500V(AC)**	**CECC 42 000**
Insulation Resistance	**≥ 10MΩ**	**CECC 42 000**
Response Time	**<25 ns**