


Metal Oxide Varistors (MOV)

Features

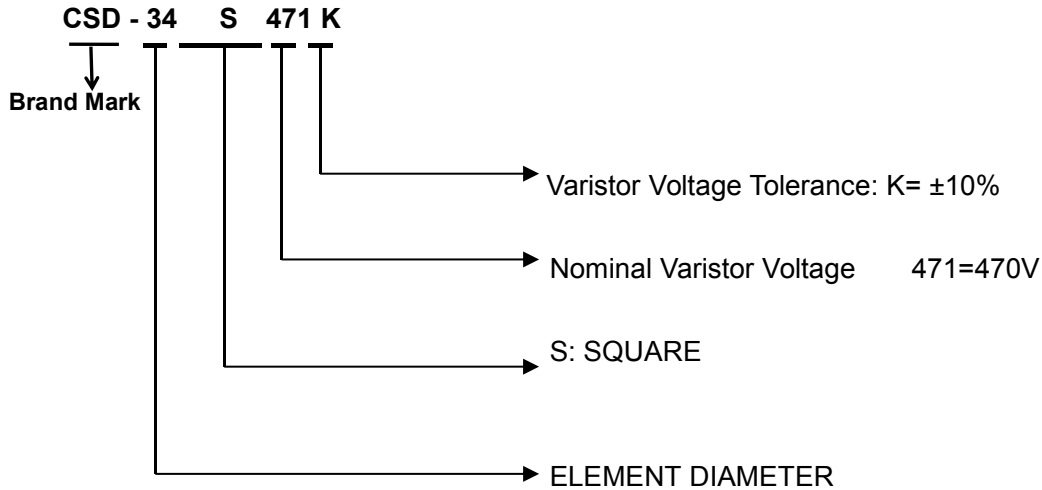
- Wide operating voltage (V_{1mA}) range from 47V to 1800V
- Fast responding to transient over-voltage
- Large absorbing transient energy capability
- Low clamping ratio and no follow-on current
- Meets MSL level 1, per J-STD-020
- Operating Temperature: -40°C ~ +85°C
- Storage Temperature: -40°C ~ +125°C
- UL 1449 4th for SPD Type 5 application
- Safety certification: 



Applications

- Transistor, diode, IC, thyristor or triac semiconductor protection
- Surge protection in consumer electronics
- Surge protection in industrial electronics
- Surge protection in electronic home appliances, gas and petroleum appliances
- Relay and electromagnetic valve surge absorption

Description of Part Number



Delivery Time

| Standard MOV | Delivery Time | Standard MOV | Delivery Time |
|-----------------|---------------|--------------|---------------|
| 34S470K~34S182K | 32days | | |



Electrical Characteristics

| Part Number Marking | Maximum Allowable Voltage | | Varistor Voltage V _{1mA} (V) | Maximum Clamping Voltage | | Rated voltage Reference V | Surge Operating Duty Test IEC 61643-11 (8/20μs) | | Maximum Energy 10/1000μs Joule | Typical Capacitance (Reference) @1KHz pf |
|------------------------|---------------------------|-----------------|--|--------------------------|--------------------|---------------------------------|---|------------------|--------------------------------------|---|
| | V _{AC} | V _{DC} | | I _p (A) | V _c (V) | | I _n | I _{max} | | |
| 34S470K | 30V | 38V | 47V(42~52) | 60A | 93V | DC24V | 10KA | 20KA | 96J | 35000pf |
| 34S560K | 35V | 45V | 56V(50~63) | 60A | 110V | DC24V | 10KA | 20KA | 115J | 29500pf |
| 34S680K | 40V | 56V | 68V(61~75) | 60A | 135V | DC24V | 10KA | 20KA | 136J | 24200pf |
| 34S820K | 50V | 65V | 82V(74~90) | 300A | 135V | DC48V | 10KA | 20KA | 156J | 17950pf |
| 34S101K | 60V | 85V | 100V(90~110) | 300A | 165V | DC48V | 20KA | 50KA | 195J | 15000pf |
| 34S121K | 75V | 100V | 120V(108~132) | 300A | 200V | DC60V | 20KA | 50KA | 235J | 12200pf |
| 34S151K | 95V | 125V | 150V(135~165) | 300A | 250V | DC60V | 20KA | 50KA | 296J | 10000pf |
| 34S181K | 115V | 150V | 180V(162~198) | 300A | 300V | AC100V | 20KA | 50KA | 350J | 8250pf |
| 34S201K | 130V | 170V | 200V(185~225) | 300A | 340V | AC125V | 20KA | 50KA | 400J | 6750pf |
| 34S221K | 140V | 180V | 220V(198~242) | 300A | 360V | AC125V | 20KA | 50KA | 450J | 6400pf |
| 34S241K | 150V | 200V | 240V(222~270) | 300A | 395V | AC125V | 20KA | 50KA | 480J | 5650pf |
| 34S271K | 180V | 225V | 270V(256~310) | 300A | 455V | AC125V | 20KA | 50KA | 540J | 5100pf |
| 34S301K | 190V | 250V | 300V(270~330) | 300A | 500V | AC125V | 20KA | 50KA | 600J | 4510pf |
| 34S331K | 210V | 275V | 330V(297~363) | 300A | 550V | AC250V | 20KA | 50KA | 656J | 4150pf |
| 34S361K | 230V | 300V | 360V(324~396) | 300A | 595V | Telephone | 20KA | 50KA | 745J | 3750pf |
| 34S391K | 250V | 320V | 390V(362~440) | 300A | 650V | test | 20KA | 50KA | 830J | 3500pf |
| 34S431K | 275V | 350V | 430V(387~473) | 300A | 710V | AC250V | 20KA | 50KA | 920J | 2950pf |
| 34S471K | 300V | 385V | 470V(423~517) | 300A | 775V | AC250V | 20KA | 50KA | 1000J | 2880pf |
| 34S511K | 320V | 415V | 510V(459~561) | 300A | 845V | AC250V | 20KA | 50KA | 1060J | 2650pf |
| 34S561K | 350V | 460V | 560V(504~616) | 300A | 925V | AC250V | 20KA | 50KA | 1150J | 2450pf |
| 34S621K | 385V | 505V | 620V(558~682) | 300A | 1025V | AC250V | 20KA | 50KA | 1250J | 2200pf |
| 34S681K | 420V | 560V | 680V(612~748) | 300A | 1120V | AC250V | 20KA | 50KA | 1250J | 2000pf |
| 34S711K | 440V | 585V | 710V(644~786) | 300A | 1180V | AC250V | 20KA | 50KA | 1280J | 1950pf |
| 34S751K | 460V | 615V | 750V(675~825) | 300A | 1240V | AC250V | 20KA | 45KA | 1280J | 1820pf |
| 34S781K | 485V | 640V | 780V(702~858) | 300A | 1290V | AC250V | 20KA | 45KA | 1350J | 1750pf |
| 34S821K | 510V | 670V | 820V(738~902) | 300A | 1355V | AC380V or G | 20KA | 45KA | 1395J | 1650pf |
| 34S911K | 550V | 745V | 910V(819~1001) | 300A | 1500V | AC380V or G | 20KA | 45KA | 1475J | 1500pf |
| 34S951K | 575V | 760V | 950V(855~1045) | 300A | 1570V | AC380V or G | 20KA | 45KA | 1485J | 1430pf |
| 34S102K | 625V | 825V | 1000V(900~1100) | 300A | 1650V | AC380V or G | 20KA | 45KA | 1550J | 1350pf |
| 34S112K | 680V | 895V | 1100V(990~1210) | 300A | 1815V | AC380V or G | 20KA | 45KA | 1700J | 1230pf |
| 34S122K | 750V | 980V | 1200V(1150~1320) | 300A | 1980V | AC380V or G | 20KA | 45KA | 1750J | 1135pf |
| 34S142K | 850V | 1120V | 1400V(1315~1540) | 300A | 2310V | AC380V or G | 15KA | 40KA | 1750J | 970pf |
| 34S162K | 1000V | 1320V | 1600V(1550~1760) | 300A | 2640V | AC380V or G | 15KA | 40KA | 2000J | 840pf |
| 34S182K | 1100V | 1465V | 1800V(1700~1980) | 300A | 2970V | AC380V or G | 15KA | 40KA | 2000J | 800pf |

Dimension(mm)



| | | | |
|--------|-----------------|--|-------------|
| 1.1 | APPEARANCE | Without Any Crack, Marking Should be Clear | |
| 1.2 | DIMENSIONS (mm) | | |
| D(Max) | 35mm | H(Max) | 35mm |
| e | 0.45mm(±0.05mm) | d | 6.0(±0.3mm) |
| F | | L(Min) | 13.5mm |

| Dimensions | |
|-------------------------------|---------|
| Part number | T (max) |
| 34S241K | 3.9mm |
| 34S271K | 4.1mm |
| 34S301K | 4.3mm |
| 34S331K | 4.5mm |
| 34S361K | 4.7mm |
| 34S391K | 4.9mm |
| 34S431K | 5.1mm |
| 34S471K | 5.3mm |
| 34S511K | 5.5mm |
| 34S561K | 5.7mm |
| 34S621K | 5.9mm |
| 34S681K | 6.1mm |
| 34S711K | 6.3mm |
| 34S751K | 6.5mm |
| 34S781K | 6.7mm |
| 34S821K | 6.9mm |
| Polar surface material: Silve | |
| Epoxy Colour :Green | |

Packing Information



| | | | | |
|-------------------|-------------------|----|------------|--|
| Quantity | 34S241K ~ 34S821K | | 32PCS/box | |
| Packing Dimension | | LP | 255mm(max) | |
| | | HP | 60mm(max) | |
| | | WP | 195mm(max) | |

Material List

| | | | |
|------------------------|--------------------|--------------------------|---|
| Drawing | | | |
| Material chart RoHs | Item | Composition | Manufacturer |
| | Coating | Epoxy Resin | Made in China, and in line with the UL 94-V0 testing, meet the environmental requirements |
| | Electrode Terminal | Copper sheet electrode | Made in China, meet the environmental requirements |
| | Electrode | Silver | Made in China, meet the environmental requirements |
| | Black parcel body | Zinc Oxide | Manufacturer of zinc oxide varistor |
| | Solder | Sn:96.5%CU 0.5%Ag3.0% | Made in China, meet the environmental requirements |