


Metal Oxide Varistors (MOV)

Features

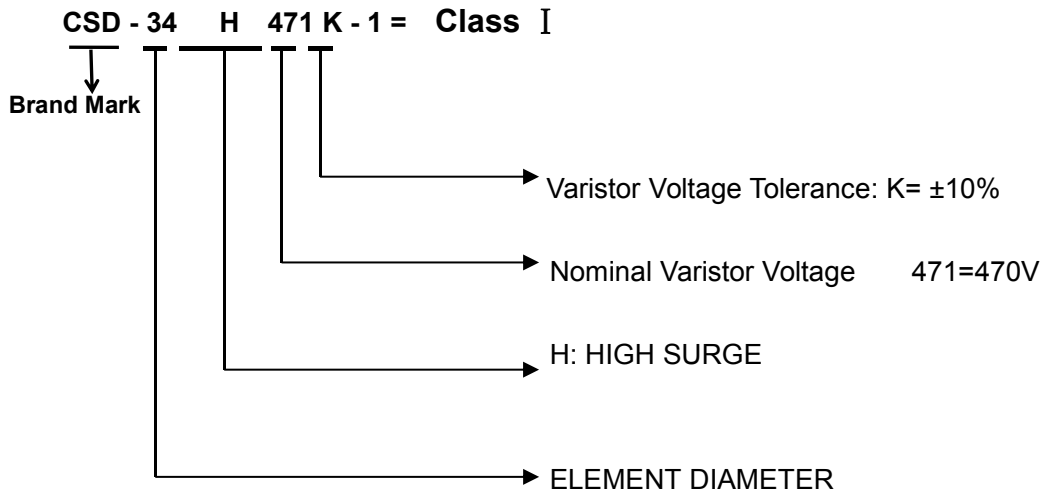
- Wide operating voltage (V1mA) range from 68V to 820V
- Fast responding to transient over-voltage
- Large absorbing transient energy capability
- Low clamping ratio and no follow-on current
- Meets MSL level 1, per J-STD-020
- Operating Temperature: -40°C ~ +85°C
- Storage Temperature: -40°C ~ +125°C
- 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 |
|-----------------------|---------------|--------------|---------------|
| 34H680K-1 ~ 34H821K-1 | 35days | | |



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 61643-1 (8/20μs) | | Impulse Current(10/350μs) 1time Iimp | Typical Capacitance(Reference) @1KHz pf |
|------------------------|---------------------------|-----------------|--|--------------------------|--------------------|---------------------------------|--|------------------|--|---|
| | V _{AC} | V _{DC} | | I _P (A) | V _C (V) | | I _n | I _{max} | | |
| 34H680K-1 | 40V | 56V | 68V(62~75) | 300A | 135V | DC12V | 20KA | 40KA | 10KA | 21500pf |
| 34H820K-1 | 50V | 65V | 82V(74~90) | 300A | 135V | DC48V | 20KA | 40KA | 10KA | 17850pf |
| 34H101K-1 | 60V | 85V | 100V(90~110) | 300A | 165V | DC48V | 20KA | 40KA | 10KA | 14650pf |
| 34H121K-1 | 75V | 100V | 120V(108~132) | 300A | 200V | DC60V | 20KA | 40KA | 10KA | 12200pf |
| 34H241K-1 | 150V | 200V | 240V(216~264) | 300A | 395V | AC125V | 20KA | 40KA | 8KA | 5650pf |
| 34H271K-1 | 175V | 225V | 270V(243~297) | 300A | 455V | AC125V | 20KA | 40KA | 8KA | 5100pf |
| 34H301K-1 | 190V | 250V | 300V(270~330) | 300A | 500V | AC125V | 20KA | 40KA | 8KA | 4510pf |
| 34H331K-1 | 210V | 275V | 330V(297~363) | 300A | 550V | AC250V Y Connect | 20KA | 40KA | 8KA | 4150pf |
| 34H361K-1 | 230V | 300V | 360V(324~396) | 300A | 595V | | 20KA | 40KA | 8KA | 3750pf |
| 34H391K-1 | 250V | 320V | 390V(351~429) | 300A | 650V | | 20KA | 40KA | 8KA | 3500pf |
| 34H431K-1 | 275V | 350V | 430V(387~473) | 300A | 710V | | 20KA | 40KA | 8KA | 2950pf |
| 34H471K-1 | 300V | 385V | 470V(423~517) | 300A | 775V | | 20KA | 40KA | 8KA | 2880pf |
| 34H511K-1 | 320V | 415V | 510V(459~561) | 300A | 845V | AC250V | 20KA | 40KA | 8KA | 2650pf |
| 34H561K-1 | 350V | 460V | 560V(504~616) | 300A | 925V | AC250V | 20KA | 40KA | 7.5KA | 2450pf |
| 34H621K-1 | 385V | 505V | 620V(558~682) | 300A | 1025V | AC250V | 20KA | 40KA | 7.5KA | 2200pf |
| 34H681K-1 | 420V | 560V | 680V(612~748) | 300A | 1120V | AC250V | 20KA | 40KA | 6.5KA | 2000pf |
| 34H711K-1 | 440V | 585V | 710V(644~786) | 300A | 1180V | AC250V | 20KA | 40KA | 6.5KA | 1950pf |
| 34H751K-1 | 460V | 615V | 750V(675~825) | 300A | 1240V | AC250V | 20KA | 40KA | 5.5KA | 1820pf |
| 34H781K-1 | 485V | 640V | 780V(702~858) | 300A | 1290V | AC250V | 20KA | 40KA | 5.5KA | 1750pf |
| 34H821K-1 | 510V | 670V | 820V(738~902) | 300A | 1355V | AC380V or G | 20KA | 40KA | 5KA | 1650pf |

Dimension(mm)



| TABLE1 | | TABLE2 | |
|--------------|--------------|-------------|--------|
| Symbol | Dimensions | Part number | T(Max) |
| D(Max) | 35.0mm | 34H680K-1 | 3.01mm |
| H(Max) | 35.0mm | 34H820K-1 | 3.05mm |
| Tmax | TABLE2 | 34H101K-1 | 3.26mm |
| e | 0.45mm | 34H121K-1 | 3.50mm |
| d | 7.0(±0.1mm) | 34H241K-1 | 4.96mm |
| F | 25.4(±1.0mm) | 34H271K-1 | 5.39mm |
| L(Min) | 16.5mm | 34H301K-1 | 5.59mm |
| Epoxy Colour | Green | 34H331K-1 | 5.94mm |
| | | 34H361K-1 | 6.29mm |
| | | 34H391K-1 | 6.76mm |
| | | 34H431K-1 | 7.10mm |
| | | 34H471K-1 | 7.57mm |
| | | 34H511K-1 | 8.03mm |
| | | 34H561K-1 | 8.61mm |
| | | 34H621K-1 | 9.31mm |
| | | 34H681K-1 | 8.58mm |
| | | 34H711K-1 | 8.91mm |
| | | 34H751K-1 | 9.24mm |
| | | 34H781K-1 | 9.53mm |
| | | 34H821K-1 | 8.93mm |

Packing Information

| Part Number | Quantity | Packaging Option |
|-----------------------|----------|------------------|
| 34H680K-1 ~ 34H561K-1 | 32PCS | Foam box |
| 34H621K-1 ~ 34H821K-1 | 20PCS | Foam box |

Foam Box Bulk Pack



Material List

| | | | | |
|---------|--------------------|--------------------------|---|--------------|
| Drawing | | | | |
| | Material chart | Item | Composition | Manufacturer |
| RoHs | 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 | |