

Varistors (MOV)



Features

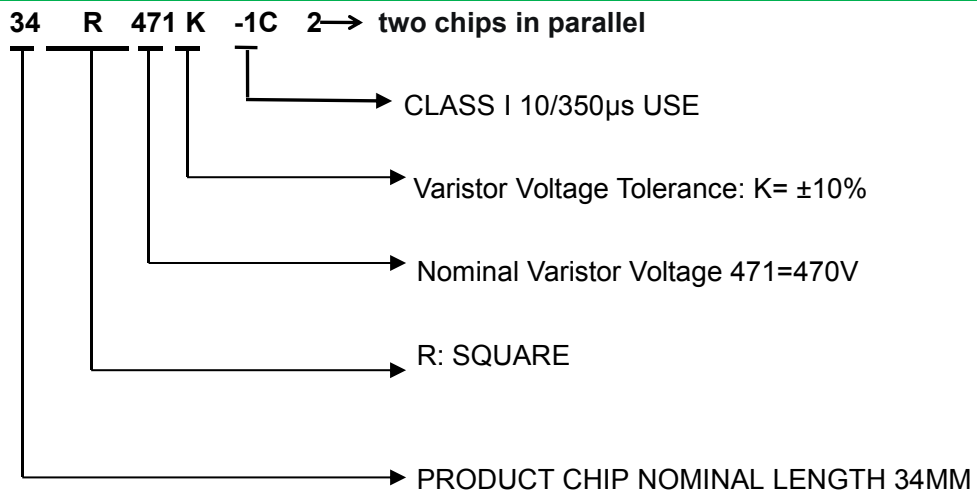
- Wide operating voltage (V1mA) range from 240V to 820V
- Fast responding to transient over-voltage
- Large absorbing transient energy capability
- Low clamping ratio and no follow-on current
- Meets MSL level 1, per J-STD-020
- Operating Temperature: -40°C ~ +85°C
- Storage Temperature: -40°C ~ +105°C
- UL 1449 4th for SPD Type 5 application
- Safety certification:



Applications

- SPD , Surge Protection Device, Surge Protective Devices

Description of Part Number



Delivery Time

Standard MOV	Delivery Time	Standard MOV	Delivery Time
34R241K-1C2 ~ 34R821K-1C2	40days		



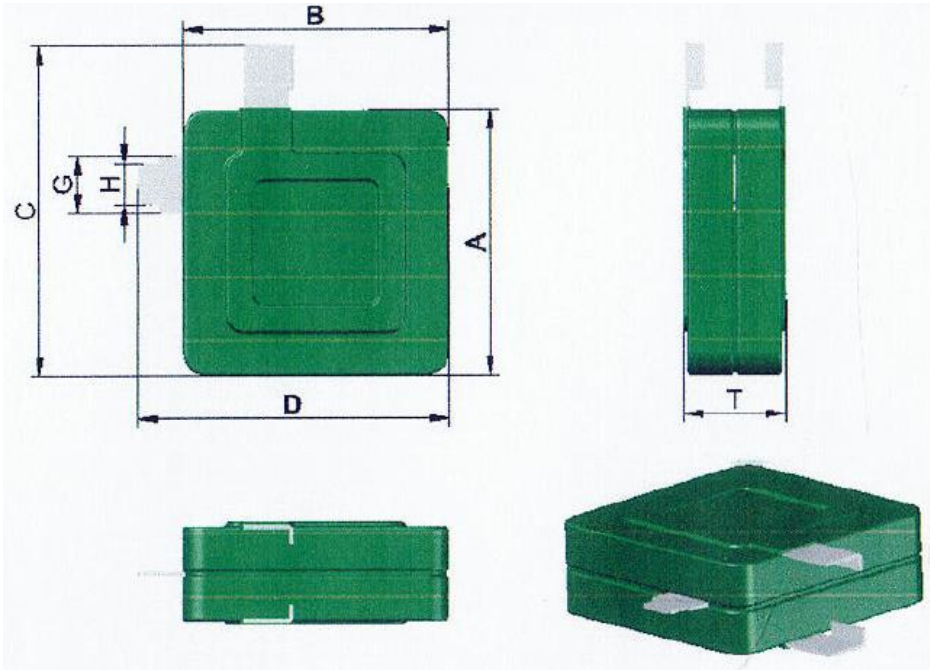
Electrical Characteristics

Part Number Marking	Maximum Allowable Voltage		Varistor Voltage V _{1mA} (V)	Maximum Clamping Voltage		Impulse Current(10/350μs)	Nominal discharge current (8/20μs) IEC 61643-11	Maximum discharge Current(8/20μs) IEC61643-11	Safety Certification
	V _{AC} .rms	V _{DC}		I _P (A)	V _C (V)	limp	I _n	I _{max}	
						1time	15times	1time	UL /CUL
34R241K-1C2	150V	200V	240v(216~264)	300	395V	12.5KA	30KA	80KA	√
34R271K-1C2	175V	225V	270V(243~297)	300	455V	12.5KA	30KA	80KA	√
34R301K-1C2	190V	250V	300V(270~330)	300	500V	12.5KA	30KA	80KA	-
34R331K-1C2	210V	275V	330V(297~363)	300	550V	12.5KA	30KA	80KA	√
34R361K-1C2	230V	300V	360V(324~396)	300	595V	12.5KA	30KA	80KA	√
34R391K-1C2	250V	320V	390V(351~429)	300	650V	12.5KA	30KA	80KA	√
34R431K-1C2	275V	350V	430V(387~473)	300	710V	12.5KA	30KA	80KA	√
34R471K-1C2	300V	385V	470V(423~517)	300	775V	12.5KA	30KA	80KA	√
34R511K-1C2	320V	415V	510V(459~561)	300	845V	12.5KA	30KA	80KA	√
34R561K-1C2	350V	460V	560V(504~616)	300	925V	12.5KA	30KA	80KA	√
34R621K-1C2	385V	505V	620V(558~682)	300	1025V	12.5KA	30KA	80KA	√
34R681K-1C2	420V	560V	680V(612~748)	300	1120V	12.5KA	30KA	80KA	√
34R711K-1C2	440V	585V	710V(644~786)	300	1180V	12.5KA	30KA	80KA	√
34R751K-1C2	460V	615V	750V(675~825)	300	1240V	12.5KA	30KA	80KA	√
34R781K-1C2	485V	640V	780V(702~858)	300	1290V	12.5KA	30KA	80KA	√
34R821K-1C2	510V	670V	820V(738~902)	300	1355V	12.5KA	30KA	80KA	√
Maximum DC Leakage Current				30μA		At 75% of Varistor Voltage			
Nonlinear exponent(α)				≥ 15		$\alpha = \frac{\log \frac{I_1}{I_2}}{\log \frac{V_1}{V_2}}$			
① Nominal discharge current 8/20us (I _n)				Test Current Waveform 8/20μs*15 (I _n .15times) Divided into three groups of 5 times each, with 1 minute interval between groups and 30 minutes interval between groups					
② Maximum discharge current (I _{max})				Test Current Waveform 8/20μs*1time					
③ Impulse current(limp)				Test Current Waveform 10/350μs*1time					
<p>Notes: The current impulse test need to use different Varistor samples for test ① I_n, ② I_{max} and ③ limp item, and can also be tested ①I_n+②I_{max} or ①I_n+③limp item, but cannot be tested all the items(① I_n, ②I_{max} and ③limp) with one same Varistor samples.</p>									
Temperature Coefficient Of Varistor Voltage				-0.05 % / °C max.		$\frac{V_c 85^\circ C - V_c 15^\circ C}{V_{cat} 25^\circ C} \times \frac{1}{60} \times 100 (\% ^\circ C)$			

Dimension(mm)



1.1	APPEARANCE	Without Any Crack, Marking Should be Clear	
1.2		DIMENSIONS (mm)	
A	35.5(±0.5mm)	B	35.5(±0.5mm)
C	43.5(±0.5mm)	D	41.8(±0.5mm)
G	8.2(±0.5mm)	H	5.5(±0.3mm)



Dimensions	
Part number	T (max)
34R241K-1C2	11.5mm
34R271K-1C2	11.9mm
34R301K-1C2	12.1mm
34R331K-1C2	12.5mm
34R361K-1C2	12.9mm
34R391K-1C2	13.1mm
34R431K-1C2	13.7mm
34R471K-1C2	14.1mm
34R511K-1C2	14.5mm
34R561K-1C2	14.8mm
34R621K-1C2	15.0mm
34R681K-1C2	15.5mm
34R711K-1C2	16.9mm
34R751K-1C2	17.3mm
34R781K-1C2	17.7mm
34R821K-1C2	18.1mm
Polar surface material: Silve	
Epoxy Colour :Green	

Marking



Packing Information



Quantity	34R241K-1C2~34R821K-1C2		16PCS/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