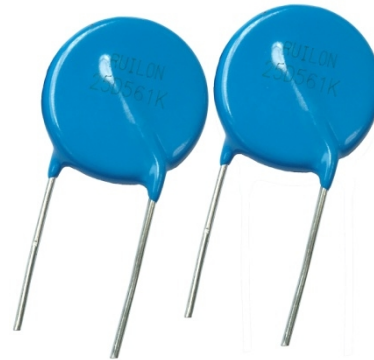


Features

- I Wide operating voltage (V_{1mA}) range from 82V to 1200V.
- I Fast responding to transient over-voltage.
- I Large absorbing transient energy capability.
- I Low clamping ratio and no following-on current.



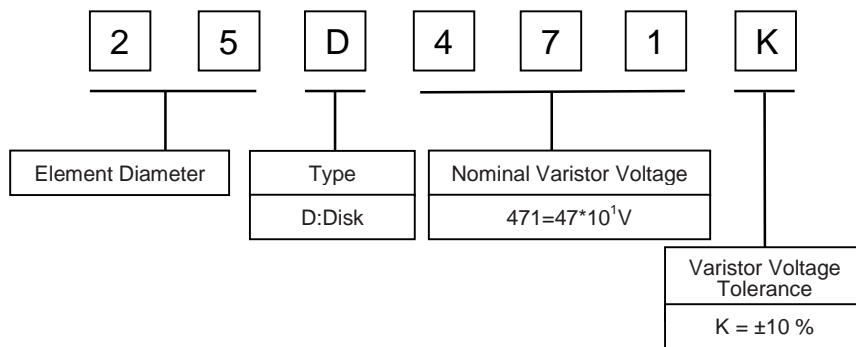
General Information

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

General Characteristics

- I Body: Nickel Plated
- I Devices with No Leads: Nickel Plated
- I Operating Temperature: -40°C to +85°C
- I Storage Temperature: -40 °C to +125°C
- I Axial Devices: Tin Plated

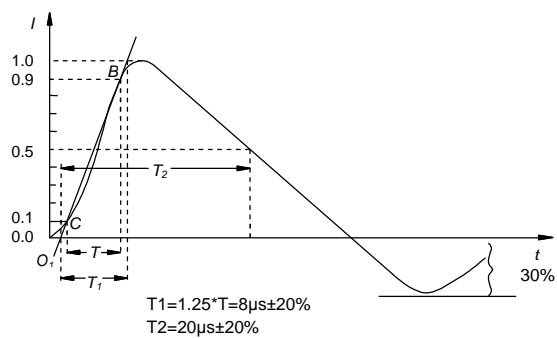
Part Number Code



Electrical Characteristics

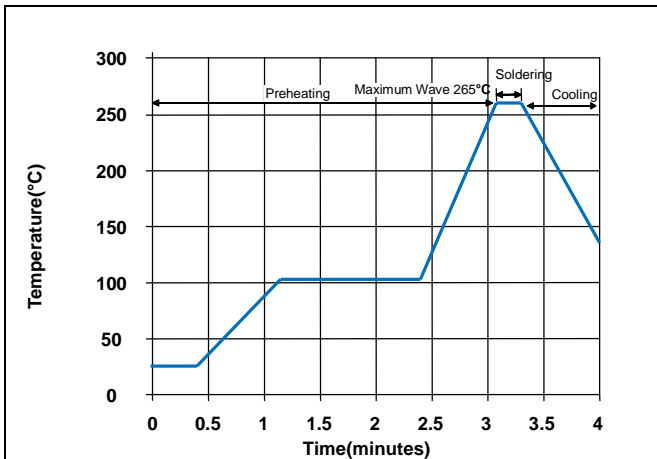
Type Number	Varistor Voltage	Max. Allowable Voltage		Max. Energy (10/1000µs)	Max. Clamping Voltage		Max. Peak Current (8/20µs)	Typical Capacitance (Reference)
	V _{1mA} (V)	V _{AC} (V)	V _{DC} (V)	(J)	I _p (A)	V _c (V)	I(A)	@1KHz(pf)
25D820K	74~90	50	65	80	150	135	18000	7700
25D101K	90~110	60	85	100	150	165	18000	6300
25D121K	108~132	75	100	120	150	200	18000	5200
25D151K	135~165	95	125	160	150	250	18000	4300
25D181K	162~198	115	150	175	150	300	18000	3500
25D201K	185~225	130	170	190	150	340	18000	3200
25D221K	198~242	140	180	200	150	360	18000	2900
25D241K	216~264	150	200	220	150	395	18000	2650
25D271K	243~297	175	225	255	150	455	18000	2400
25D301K	270~330	190	250	275	150	500	18000	2100
25D331K	297~363	210	275	300	150	550	18000	1900
25D361K	324~396	230	300	330	150	595	18000	1750
25D391K	351~429	250	320	360	150	650	18000	1600
25D431K	387~473	275	350	380	150	710	18000	1500
25D471K	423~517	300	385	400	150	775	18000	1400
25D511K	459~561	320	415	420	150	845	18000	1250
25D561K	504~616	350	460	440	150	925	18000	1150
25D621K	558~682	385	505	450	150	1025	18000	1050
25D681K	612~748	420	560	460	150	1120	18000	950
25D751K	675~825	460	615	510	150	1240	18000	850
25D781K	702~858	485	640	530	150	1290	18000	800
25D821K	738~902	510	670	570	150	1355	15000	750
25D911K	819~1001	550	745	620	150	1500	15000	700
25D102K	900~1100	625	825	685	150	1650	15000	650
25D112K	990~1210	680	895	770	150	1815	15000	600
25D122K	1080~1320	750	990	770	150	1980	15000	550

Electrical Ratings

Items	Test Condition/Description	Requirement
Varistor Voltage	The voltage between two terminals with the specified measuring current 1mA.DC applied is called Vb.	To meet the Specified value
Maximum Allowable	The recommended maximum sine wave voltage (RMS) or the Maximum DC voltage can be applied continuously.	
Maximum Clamping Voltage	The maximum voltage between two terminals with the specification standard impulse current. Applied waveform: 8/20μs 	
Rated Wattage	The maximum average power that can be applied within the specified ambient temperature.	
Energy	The maximum energy within the varistor voltage change of ±10% when one impulse of 10/1000μs or 2ms is applied.	
Withstanding Surge Current	The maximum current within the varistor voltage change of ±10% with the standard impulse current (8/20μs) applied one time.	

Soldering Recommendation

Wave Lead Free Soldering Recommendation



Item	Conditions
Peak Temperature	265°C
Dipping Time	10 seconds (max.)
Soldering	1 time

Recommendation Reworking Conditions with Soldering Iron

Item	Conditions
Temperature of Soldering Iron-tip	360°C (max.)
Soldering Time	3 seconds (max.)
Distance from Varistor	2mm (min.)

Dimensions

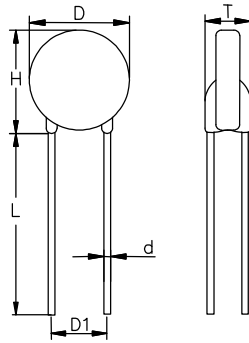


TABLE 1		
Symbol	Millimeters	Inches
H(max)	31.0	1.22
D(max)	28.0	1.024
D1(±1.0)	10.0	0.394
T(max)	TABLE 2	
d(±0.1)	1.0	0.039

TABLE 2---T(max.)

Model	Millimeters	Inches	Model	Millimeters	Inches	Model	Millimeters	Inches
820K	4.9	0.193	301K	6.1	0.24	681K	8.6	0.339
101K	5.1	0.201	331K	6.3	0.248	751K	9.1	0.358
121K	5.2	0.205	361K	6.6	0.26	781K	9.3	0.366
151K	5.6	0.22	391K	6.8	0.268	821K	9.6	0.378
181K	5.3	0.209	431K	7.1	0.28	911K	10.2	0.402
201K	5.5	0.217	471K	7.4	0.291	102K	10.8	0.425
221K	5.6	0.22	511K	7.8	0.307	112K	11.5	0.453
241K	5.7	0.224	561K	8.1	0.319	122K	12.2	0.48
271K	5.9	0.232	621K	8.5	0.335			