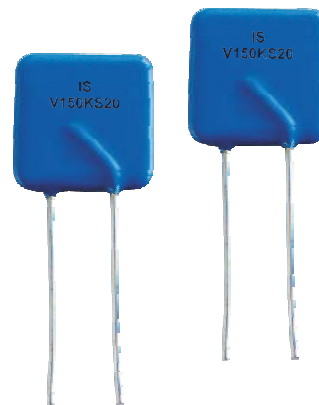


Square Disc Varistors with Radial Leads - KS 20 Series

Description

Disc Varistors with Radial Leads are standard metal oxide varistors designed mainly for electronic applications. They offer better surge protection than the round ones for the same space. They are widely used in PCBs, computers, power supplies, telecommunication network equipment and motor controls. The advantages of the Square Disc Varistors with Radial Leads are: radial leads construction for PCB mounting; the major advantage of the KS Series is its increased peak current capability in comparison to the round ones.



Main Features

Wide Operating Voltage Range V_{RMS}	130 V to 750 V
High Energy Absorption Capability W_{max} (2 ms)	150 J to 580 J
High Peak Current Capability I_{max} (8/20 μ s)	15000 A
Wire Terminals for PCB Mounting	

General Technical Data

Climatic Category	40/85/56	in accordance with IEC 60068-1
LCT	-40°C	
UCT	+85°C	
Damp Heat, Steady State (93% r.h., 40°C)	56 days	in accordance with IEC 60068-2-3
Operating Temperature	-40 ... +85°C	in accordance with CECC 42 000
Storage Temperature	-40 ... +125°C	
Electric Strength	≥ 2.5 kV	in accordance with CECC 42 000
Insulation Resistance	≥ 1.0 G Ω	in accordance with CECC 42 000
Response Time	< 25 ns	

Type Designation

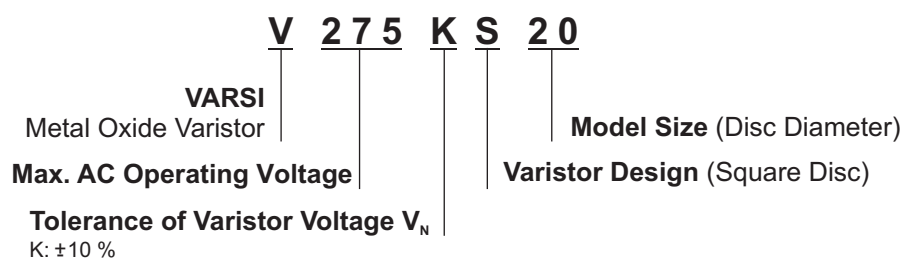
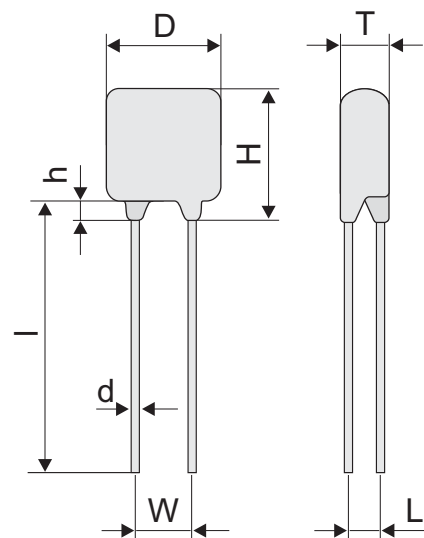


Table of Standard Values

Part Number	Maximum Ratings TA = +85°C (+185°F)					Characteristics TA = +25°C (+77°F)					V - I Characteristic Page	Pulse Rating Page
	Operating Voltage		Average Power Dissipation P _{max} (W)	Permissible Peak Current (8/20 μs) I _{max} (A)	Energy Absorption (2 ms) W _{max} (J)	Varistor Voltage (1 mA) V _N (V)	Standard Tolerance of V _N ΔV _N (±%)	Maximum Clamping Voltage at Test Current (8/20 μs)		Typical Capacitance f=1kHz C (pF)		
	RMS Voltage V _{RMS} (V)	DC Voltage V _{DC} (V)						V _C (V)	I (A)			
V130KS20	130	170	1.00	15000	150	205	10	340	125.0	1900	3	3
V140KS20	140	180	1.00	15000	155	220	10	360	125.0	1750	3	3
V150KS20	150	200	1.00	15000	160	240	10	395	125.0	1650	3	3
V175KS20	175	225	1.00	15000	170	270	10	455	125.0	1400	3	3
V210KS20	210	270	1.00	15000	180	330	10	540	125.0	1300	3	3
V230KS20	230	300	1.00	15000	190	360	10	595	125.0	1100	3	3
V250KS20	250	320	1.00	15000	210	390	10	650	125.0	1000	3	3
V275KS20	275	350	1.00	15000	230	430	10	710	125.0	900	3	3
V300KS20	300	385	1.00	15000	240	470	10	775	125.0	830	3	3
V320KS20	320	420	1.00	15000	275	510	10	840	125.0	770	3	3
V350KS20	350	460	1.00	15000	300	560	10	925	125.0	670	3	3
V385KS20	385	505	1.00	15000	320	620	10	1025	125.0	550	3	3
V420KS20	420	560	1.00	15000	360	680	10	1120	125.0	490	3	3
V440KS20	440	585	1.00	15000	380	715	10	1180	125.0	470	3	3
V460KS20	460	615	1.00	15000	390	750	10	1240	125.0	460	3	3
V510KS20	510	670	1.00	15000	410	820	10	1355	125.0	440	3	3
V550KS20	550	745	1.00	15000	425	910	10	1500	125.0	380	3	3
V625KS20	625	825	1.00	15000	480	1000	10	1650	125.0	350	3	3
V680KS20	680	895	1.00	15000	525	1100	10	1815	125.0	330	3	3
V750KS20	750	1060	1.00	15000	580	1200	10	1980	125.0	300	3	3

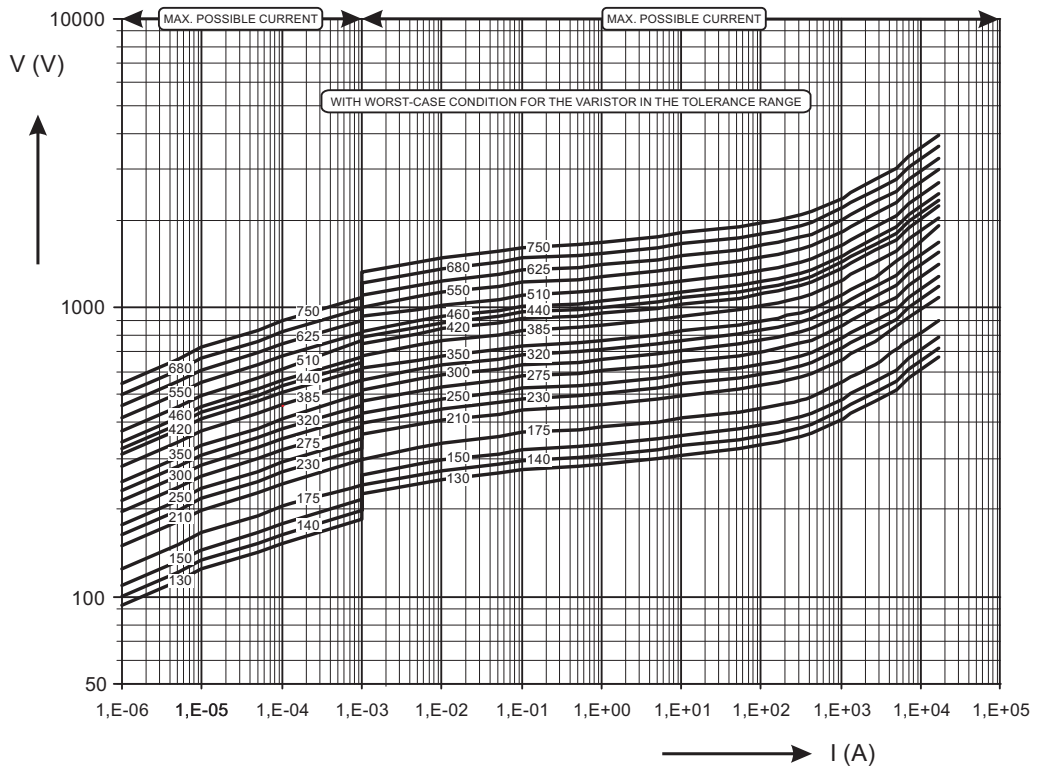
Dimensions

D _{max} (mm)	H _{max} (mm)	T _{max} (mm)	W ±1 (mm)	L ±1 (mm)	h _{max} (mm)	I _{max} (mm)	d ±0.05 (mm)	Part Number
24.0	28.0	4.8	10.0	2.4	4	30	0.8	V130KS20
24.0	28.0	5.3	10.0	2.6	4	30	0.8	V140KS20
24.0	28.0	5.4	10.0	2.7	4	30	0.8	V150KS20
24.0	28.0	5.5	10.0	2.8	4	30	0.8	V175KS20
24.0	28.0	5.6	10.0	2.9	4	30	0.8	V210KS20
24.0	28.0	5.7	10.0	3.0	4	30	0.8	V230KS20
24.0	28.0	5.8	10.0	3.1	4	30	0.8	V250KS20
24.0	28.0	5.8	10.0	3.2	4	30	0.8	V275KS20
24.0	28.0	6.0	10.0	3.3	4	30	0.8	V300KS20
24.0	28.0	6.1	10.0	3.4	4	30	0.8	V320KS20
24.0	28.0	6.3	10.0	3.6	4	30	0.8	V350KS20
24.0	28.0	6.5	10.0	3.8	4	30	0.8	V385KS20
24.0	28.0	6.7	10.0	4.0	4	30	0.8	V420KS20
24.0	28.0	6.8	10.0	4.1	4	30	0.8	V440KS20
24.0	28.0	6.9	10.0	4.2	4	30	0.8	V460KS20
24.0	28.0	7.0	10.0	4.3	4	30	0.8	V510KS20
24.0	28.0	7.8	10.0	5.1	4	30	0.8	V550KS20
24.0	28.0	8.3	10.0	5.6	4	30	0.8	V625KS20
24.0	28.0	8.7	10.0	6.0	4	30	0.8	V680KS20
24.0	28.0	9	10.0	6.3	4	30	0.8	V750KS20



V-I Characteristics

V130-V750KS20



Pulse Ratings

V130KS20-V750KS20

