

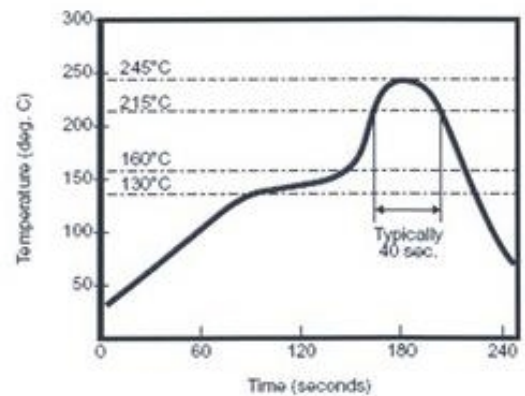
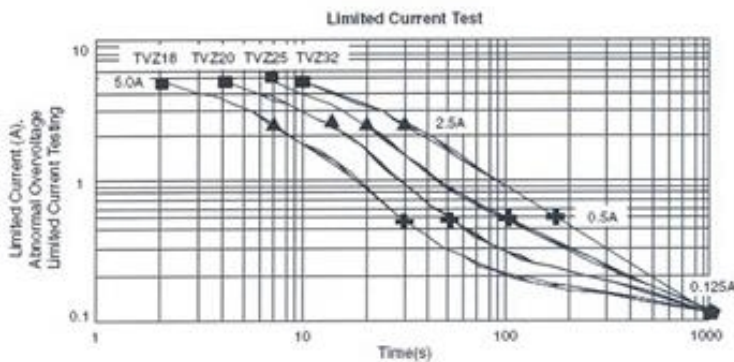
TMOV THERMO CUTOFF SERIES



FEATURES

Steady State AC Voltage Range ($V_{M(AC)RMS}$)	50 V ~ 1000 V
High Peak Surge Current Rating (I_{TM}) 8/20 μ s Pulse	10K A ~ 40K A
Single-Pulse Energy Range (W_{TM}) 10/1000 μ s Square Wave	56 J ~ 1400 J
Operating Temperature Range	-55°C ~ +85°C
Storage Temperature Range	-55°C ~ +85°C
Hi-Pot Encapsulation (Isolation Voltage Capability)	2500 V _{DC}
Isolation Capability (When thermal element is open)	600 V _{DC}
Insulation Resistance	> 1000 M Ω
Maximum Voltage-Temperature Coefficient	< 0.01% / °C
Response time	< 15ns

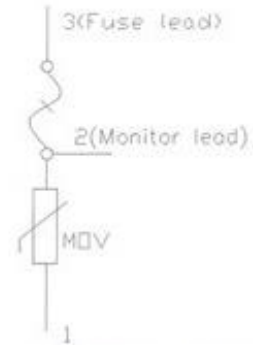
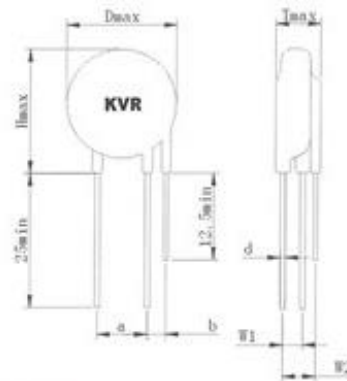
Soldering Profile



METAL OXIDE VARISTOR

DIMENSIONS

TMOV20



Item No.	T max. (mm)	W 1 max. (mm)	W 2 max. (mm)
- 8 2 0 A	7 8 0	1 9 0	3 3 0
- 1 0 1 A	7 8 0	1 9 0	3 3 0
- 1 2 1 A	7 8 0	1 9 0	3 4 0
- 1 5 1 A	7 8 0	1 9 0	3 4 0
- 1 8 1 A	7 8 0	1 9 0	3 4 0
- 2 0 1 A	7 9 0	2 0 0	3 6 0
- 2 2 1 A	8 1 0	2 1 0	3 7 0
- 2 4 1 A	8 2 0	2 2 0	3 9 0
- 2 7 1 A	8 3 0	2 3 0	3 9 0
- 3 0 1 A	8 4 0	2 5 0	4 1 0
- 3 3 1 A	8 5 0	2 7 0	4 3 0
- 3 6 1 A	8 6 0	2 8 0	4 4 0
- 3 9 1 A	8 7 0	3 0 0	4 6 0

Item No.	T max. (mm)	W 1 max. (mm)	W 2 max. (mm)
- 4 3 1 A	8 8 0	3 2 0	4 8 0
- 4 7 1 A	8 1 0	3 4 0	5 1 0
- 5 1 1 A	8 3 0	3 6 0	5 4 0
- 5 6 1 A	8 7 0	3 8 0	5 6 0
- 6 2 1 A	1 0 1 0	4 1 0	5 9 0
- 6 8 1 A	1 0 4 0	4 4 0	6 2 0
- 7 5 1 A	1 0 7 0	4 7 0	6 6 0
- 7 8 1 A	1 0 8 0	4 9 0	6 8 0
- 8 2 1 A	1 1 8 0	5 1 0	7 0 0
- 9 1 1 A	1 1 3 0	5 3 0	7 3 0
- 1 0 2 A	1 2 0 0	6 0 0	8 0 0
- 1 1 2 A	1 3 2 0	6 3 0	8 6 0

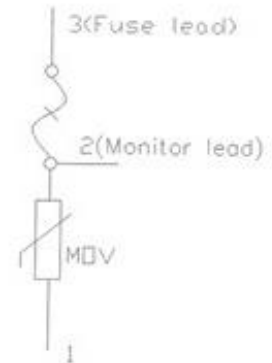
ELECTRICAL CHARACTERISTICS

ITEM NO.	SPECIFICATION (25°C)					MAXIMUM RATING (85°C)				CERTIFICATION			
	Varistor Voltage (1mA DC)			@Ip Clamping Voltage (8/20µs)		Typical Capacitance	Continuous Voltage		Energy				Peak Current
	Min (V)	V _{N(DC)} (V)	Max (V)	V _c (V)	I _p (A)		V _{RMS}	V _{DC}	10/1000µs	(8/20µs)			
						F= 1KHz (pF)	V _{M(AC)} (V)	V _{M(DC)} (V)	W _{TM} (J)	I _{TM} (KA)			
TMOV20-820A	74	82	90	135	100	8200	50	65	56	10	CE	VDE	UL
TMOV20-101A	90	100	110	165		8000	60	85	70				
TMOV20-121A	108	120	132	200		5500	75	100	85				
TMOV20-151A	135	150	165	250		4200	95	125	106				
TMOV20-181A	162	180	198	300		2500	115	150	130				
TMOV20-201A	184	200	224	340		2300	130	175	140				
TMOV20-221A	198	220	242	360		2200	140	180	155				
TMOV20-241A	216	240	264	395		2200	150	200	168				
TMOV20-271A	248	270	300	455		2100	175	225	190				
TMOV20-301A	276	300	330	500		1800	195	250	216				
TMOV20-331A	297	330	363	550		1750	210	275	228				
TMOV20-361A	325	360	396	595		1700	230	300	255				
TMOV20-391A	354	390	429	650		1400	250	320	275				
TMOV20-431A	389	430	473	710		1350	275	350	303				
TMOV20-471A	425	470	517	775		1200	300	385	350				
TMOV20-511A	462	510	561	850		1050	320	410	385				
TMOV20-561A	504	560	610	915		850	350	460	400				
TMOV20-621A	558	620	682	1025		570	385	505	410				
TMOV20-681A	612	680	748	1120		550	420	560	430				
TMOV20-751A	675	750	825	1240		530	460	615	450				
TMOV20-821A	738	820	902	1355	530	510	670	470					
TMOV20-911A	819	910	1000	1500	480	550	745	510					
TMOV20-102A	900	1000	1100	1650	480	625	800	565					
TMOV20-112A	990	1100	1210	1815	400	680	860	620					

METAL OXIDE VARISTOR

DIMENSIONS

TMOV25



Item No.	T max. (mm)	W 1 max. (mm)	W 2 max. (mm)
- 2 0 1 A	7.90	2.10	3.70
- 2 2 1 A	8.20	2.20	3.80
- 2 4 1 A	8.30	2.30	3.90
- 2 7 1 A	8.40	2.40	4.00
- 3 0 1 A	8.60	2.60	4.20
- 3 3 1 A	8.80	2.80	4.40
- 3 6 1 A	8.90	2.90	4.50
- 3 9 1 A	9.00	3.10	4.70
- 4 3 1 A	9.20	3.20	4.90
- 4 7 1 A	9.50	3.50	5.20

Item No.	T max. (mm)	W 1 max. (mm)	W 2 max. (mm)
- 5 1 1 A	9.90	3.70	5.50
- 5 6 1 A	10.10	3.90	5.70
- 6 2 1 A	10.40	4.20	6.00
- 6 8 1 A	10.70	4.50	6.30
- 7 5 1 A	11.10	4.80	6.70
- 7 8 1 A	11.30	5.00	6.90
- 8 2 1 A	11.40	5.20	7.10
- 9 1 1 A	11.80	5.60	7.60
- 1 0 2 A	12.40	6.10	8.10
- 1 1 2 A	12.60	6.60	8.70

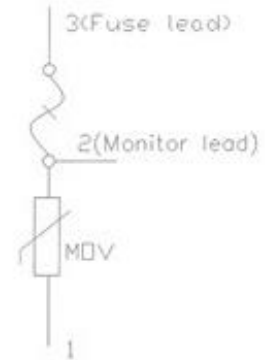
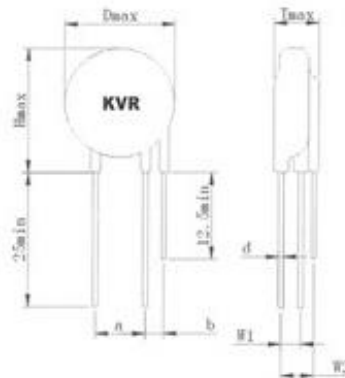
ELECTRICAL CHARACTERISTICS

ITEM NO.	SPECIFICATION (25°C)						MAXIMUM RATING (85°C)				CERTIFICATION
	Varistor Voltage (1mA DC)			@Ip Clamping Voltage (8/20 μs)		Typical Capacitance	Continuous Voltage		Energy 10/1000 μs	Peak Current (8/20 μs)	
	Min (V)	V _{NDC} (V)	Max (V)	V _c (V)	I _p (A)		V _{RMS}	V _{DC}			
						V _{M(AC)} (V)	V _{M(DC)} (V)	W _{TM} (J)	I _{TM} (KA)		
TMOV25-201A	184	200	224	340	150	3700	130	175	170	15	CE, VDE, UL
TMOV25-221A	198	220	242	360		3400	140	180	180		
TMOV25-241A	216	240	259	395		3100	150	200	190		
TMOV25-271A	255	270	297	455		2600	180	230	200		
TMOV25-331A	297	330	363	545		2200	210	270	250		
TMOV25-361A	326	360	396	595		2100	230	300	280		
TMOV25-391A	354	390	432	650		1900	250	330	310		
TMOV25-431A	389	430	466	710		1800	275	360	340		
TMOV25-471A	425	470	517	790		1600	300	390	360		
TMOV25-511A	462	510	558	850		1500	320	420	420		
TMOV25-561A	522	560	630	950		1300	360	470	440		
TMOV25-621A	558	620	682	1025		1200	390	505	460		
TMOV25-681A	612	680	748	1120		1100	420	560	480		
TMOV25-751A	675	750	825	1240		1000	460	615	500		
TMOV25-781A	702	780	858	1300		990	480	640	510		
TMOV25-821A	738	820	900	1350		930	510	675	525		
TMOV25-911A	819	910	933	1400		860	550	700	540		
TMOV25-951A	855	950	1000	1500		820	580	735	560		
TMOV25-102A	900	1000	1100	1650		760	620	800	600		
TMOV25-112A	990	1100	1200	1800		690	680	860	655		

METAL OXIDE VARISTOR

DIMENSIONS

TMOV32



Item No.	T max. (mm)	W 1 max. (mm)	W 2 max. (mm)
- 2 0 1 A	7.90	2.60	4.10
- 2 2 1 A	8.20	2.70	4.30
- 2 4 1 A	8.50	2.80	4.50
- 2 7 1 A	8.50	2.90	4.40
- 3 0 1 A	9.00	3.30	4.80
- 3 3 1 A	9.00	3.30	4.80
- 3 6 1 A	9.00	3.50	5.00
- 3 9 1 A	9.00	3.60	5.10
- 4 3 1 A	9.20	3.80	5.30
- 4 7 1 A	9.70	4.00	5.50

Item No.	T max. (mm)	W 1 max. (mm)	W 2 max. (mm)
- 5 1 1 A	9.90	4.50	5.80
- 5 6 1 A	10.30	4.90	6.40
- 6 2 1 A	10.40	4.90	6.40
- 6 8 1 A	10.70	5.10	6.60
- 7 5 1 A	11.10	5.50	7.00
- 7 8 1 A	11.30	5.70	7.20
- 8 2 1 A	11.40	6.00	7.50
- 9 1 1 A	11.80	6.50	8.00
- 1 0 2 A	12.40	7.00	8.50
- 1 1 2 A	12.60	7.50	9.00

ELECTRICAL CHARACTERISTICS

ITEM NO.	SPECIFICATION (25°C)						MAXIMUM RATING (85°C)				CERTIFICATION
	Varistor Voltage (1mA DC)			@Ip Clamping Voltage (8/20µs)			Continuous Voltage		Energy	Peak Current	
	Min (V)	V _{N(DC)} (V)	Max (V)	Vc (V)	Ip (A)	F= 1KHz (pF)	V _{RMS}	V _{DC}	W _{TM} (J)	I _{TM} (KA)	
							V _{M(AC)} (V)	V _{M(DC)} (V)			
TMOV32-201A	184	200	224	340	200	4100	130	175	210	25	CE, VDE, R
TMOV32-221A	198	220	242	360		3700	140	180	225		
TMOV32-241A	216	240	259	395		3400	150	200	240		
TMOV32-271A	255	270	297	455		2900	180	230	250		
TMOV32-331A	297	330	363	550		2600	210	270	270		
TMOV32-361A	326	360	396	595		2300	230	300	300		
TMOV32-391A	354	390	429	650		2100	250	330	330		
TMOV32-431A	389	430	466	710		2000	275	360	360		
TMOV32-471A	425	470	517	790		1700	300	390	380		
TMOV32-511A	462	510	558	850		1600	320	420	430		
TMOV32-561A	522	560	616	950		1400	360	470	490		
TMOV32-621A	558	620	674	1025		1300	390	505	550		
TMOV32-681A	612	680	736	1120		1300	420	560	600		
TMOV32-751A	675	750	825	1240		1100	460	615	520		
TMOV32-781A	702	780	858	1300		1100	480	640	550		
TMOV32-821A	738	820	900	1350		1000	510	675	580		
TMOV32-911A	819	910	933	1400		950	550	700	620		
TMOV32-951A	855	950	1000	1500		900	580	735	650		
TMOV32-102A	900	1000	1080	1650		840	620	800	680		
TMOV32-112A	990	1100	1180	1800		770	680	860	760		