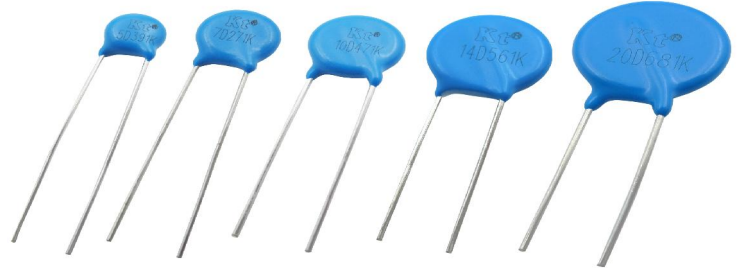


# Kingtronics®

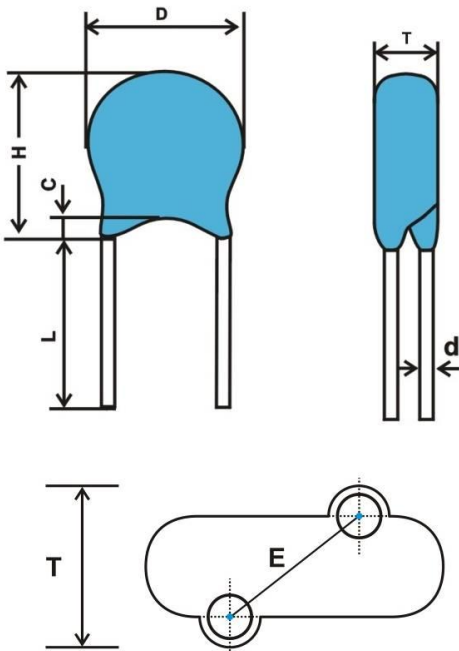
# XKT Metal Oxide Varistor

## FEATURES

- Operating Temperature Range: -40°C~+105°C
- Body Diameters Range From 5D to 20D
- Wide Operating Voltage from 18V to 1800V
- Full compliance with RoSH and REACH



## DIMENSION



L:16mm min

## Thickness (max.)

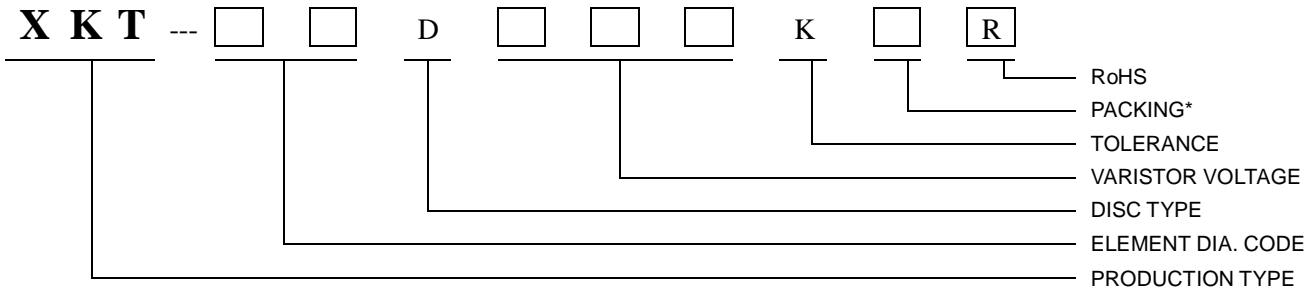
Part Code	D05	D07	D10	D14	D20
182K	--	--	--	10.5	11.0
162K	--	--	--	9.5	10.5
152K	--	--	--	9.5	10.0
142K	--	--	--	9.0	9.5
122K	--	--	--	8.0	9.0
112K	--	--	8.0	8.0	8.5
102K	--	--	7.5	7.5	8.5
911K	--	--	7.0	7.0	8.0
821K	--	--	6.5	6.5	7.5
781K	--	--	6.5	6.5	7.5
751K	--	6.0	6.5	6.5	7.5
681K	5.5	5.5	6.0	6.0	7.0
621K	5.5	5.5	6.0	6.0	7.0
561K	5.0	5.0	5.5	5.5	6.5
511K	5.0	5.0	5.5	5.5	6.5
471K	5.0	5.0	5.5	5.5	6.0
431K	4.5	4.5	5.0	5.0	6.0
391K	4.5	4.5	5.0	5.0	6.0
361K	4.5	4.5	5.0	5.0	6.0
331K	4.5	4.5	5.0	5.0	5.5
301K	4.0	4.0	4.5	4.5	5.5
271K	4.0	4.0	4.5	4.5	5.5
241K	4.0	4.0	4.5	4.5	5.5
221K	4.0	4.0	4.5	4.5	5.0
201K	4.0	4.0	4.5	4.5	5.0
181K	4.5	4.5	5.0	5.0	5.5
151K	4.5	4.5	5.0	5.0	5.5
121K	4.5	4.5	5.0	5.0	5.5
101K	4.5	4.5	5.0	5.0	5.5
820K	4.5	4.5	5.0	5.0	5.0
680K	5.0	5.0	5.5	5.5	6.0
560K	4.5	4.5	5.0	5.0	5.5
470K	4.5	4.5	5.0	5.0	5.5
390K	4.5	4.5	5.0	5.0	5.5
330K	4.5	4.5	5.0	5.0	5.5
270K	4.5	4.5	5.0	5.0	5.5
220K	4.5	4.5	4.5	4.5	5.0
180K	4.0	4.5	4.5	4.5	5.0

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# XKT Metal Oxide Varistor

## HOW TO ORDER



\*B for Bulk ; A for Ammo ; T for Tape & Reel

## METAL OXIDE VARISTOR 5D Series

#680K—180K Max. Clamping Voltage Testing Current 1A.

## SPECIFICATION

Part No	Maximum allowable Voltage		Maximum Energy (10/1000µs) (J)	Maximum Peak Current (8/20µs)	Rated Power (W)	Varistor Voltage V <sub>1.0mA</sub> (V)	Clamping Voltage (Max.)		Typical Capacitance (reference) @1KHz (pF)
	AC rms (V)	DC rms (V)					VC (V)	I <sub>p</sub> (A)	
XKT05D681K	420	560	19.4	400 / 200x2	0.1	680(612-748)	1120	5	38
XKT05D621K	385	505	17.7			620(558-682)	1025		40
XKT05D561K	350	460	16.8			560(504-616)	920		45
XKT05D511K	320	415	16.0			510(459-561)	845		50
XKT05D471K	300	385	15.0			470(423-517)	810		55
XKT05D431K	275	350	13.0			430(387-473)	745		60
XKT05D391K	250	320	12.0			390(351-429)	675		65
XKT05D361K	230	300	10.0			360(324-396)	620		70
XKT05D331K	210	275	9.5			330(297-363)	570		75
XKT05D301K	190	250	9.0			300(270-330)	520		85
XKT05D271K	175	225	8.5			270(243-297)	475		95
XKT05D241K	150	200	8.0			240(216-264)	415		100
XKT05D221K	140	180	7.0			220(198-242)	380		110
XKT05D201K	130	170	6.5			200(180-220)	355		125
XKT05D181K	115	150	5.9			180(162-198)	320		140
XKT05D151K	95	125	4.8			150(135-165)	260		165
XKT05D121K	75	100	4.0			120(108-132)	210		210
XKT05D101K	60	85	3.0			100(90-110)	175		250
XKT05D820K	50	65	2.5			82(73.8-90.2)	150		300
XKT05D680K	40	56	1.6			100 / 50x2	0.01		68(61.2-74.8)
XKT05D560K	35	45	1.3	56(50.4-61.6)	123			450	
XKT05D470K	30	38	1.1	47(42.3-51.7)	104			530	
XKT05D390K	25	31	0.9	39(35.1-42.9)	80			640	
XKT05D330K	20	26	0.8	33(29.7-36.3)	73			760	
XKT05D270K	17	22	0.6	27(24.3-29.7)	60			930	
XKT05D220K	14	18	0.5	22(19.8-24.2)	48			1150	
XKT05D180K	11	14	0.4	18(16.2-19.8)	40			1400	

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**Kingtronics**®**XKT****Metal Oxide Varistor****METAL OXIDE VARISTOR 7D Series****#680K—180K Max. Clamping Voltage Testing Current 2.5A.****SPECIFICATION**

Part No	Maximum allowable Voltage		Maximum Energy (10/1000 $\mu$ s) (J)	Maximum Peak Current (8/20 $\mu$ s)	Rated Power (W)	Varistor Voltage $V_{1.0mA}$ (V)	Clamping Voltage (Max.)		Typical Capacitance (reference) @1KHz (pF)
	AC rms (V)	DC rms (V)					VC (V)	I <sub>p</sub> (A)	
XKT07D911K	550	745	57.0	1200 / 600x2	0.25	910(819-1001)	1500	10	55
XKT07D821K	510	670	52.0			820(738-902)	1355		60
XKT07D781K	485	640	48.0			780(702-858)	1290		65
XKT07D751K	460	615	45.0			750(675-825)	1240		70
XKT07D681K	420	560	42.0			680(612-748)	1120		75
XKT07D621K	385	505	38.0			620(558-682)	1025		80
XKT07D561K	350	460	35.0			560(504-616)	925		90
XKT07D511K	320	415	31.0			510(459-561)	845		100
XKT07D471K	300	385	29.0			470(423-517)	775		105
XKT07D431K	275	350	28.0			430(387-473)	710		115
XKT07D391K	250	320	26.0			390(351-429)	650		130
XKT07D361K	230	300	24.0			360(324-396)	595		140
XKT07D331K	210	275	23.0			330(297-363)	550		150
XKT07D301K	190	250	20.0			300(270-330)	500		165
XKT07D271K	175	225	18.0			270(243-297)	455		185
XKT07D241K	150	200	15.0			240(216-264)	395		210
XKT07D221K	140	180	14.0			220(198-242)	360		230
XKT07D201K	130	170	13.0			200(180-220)	340		250
XKT07D181K	115	150	11.7			180(162-198)	300		280
XKT07D151K	95	125	9.7			150(135-165)	250		330
XKT07D121K	75	100	7.8	120(108-132)	200	420			
XKT07D101K	60	85	6.5	100(90-110)	165	500			
XKT07D820K	50	65	5.5	82(73.8-90.2)	135	600			
XKT07D680K	40	56	3.6	250 / 125x2	0.02	68(61.2-74.8)	135	2.5	740
XKT07D560K	35	45	3.1			56(50.4-61.6)	110		890
XKT07D470K	30	38	2.5			47(42.3-51.7)	93		1100
XKT07D390K	25	31	2.1			39(35.1-42.9)	77		1300
XKT07D330K	20	26	1.7			33(29.7-36.3)	65		1500
XKT07D270K	17	22	1.4			27(24.3-29.7)	53		1800
XKT07D220K	14	18	1.1			22(19.8-24.2)	43		2300
XKT07D180K	11	14	0.9			18(16.2-19.8)	36		2800

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**Kingtronics**®**XKT****Metal Oxide Varistor****METAL OXIDE VARISTOR 10D Series****#680K—180K Max. Clamping Voltage Testing Current 5A.****SPECIFICATION**

Part No	Maximum allowable Voltage		Maximum Energy (10/1000 $\mu$ s) (J)	Maximum Peak Current (8/20 $\mu$ s)	Rated Power (W)	Varistor Voltage V <sub>1.0mA</sub> (V)	Clamping Voltage (Max.)		Typical Capacitance (reference) @1KHz (pF)
	AC rms (V)	DC rms (V)					V <sub>c</sub> (V)	I <sub>p</sub> (A)	
XKT10D112K	680	895	115.0	2500 / 1250x2	0.4	1100(990-1210)	1815	25	90
XKT10D102K	625	825	102.0			1000(900-1100)	1650		100
XKT10D911K	550	745	93.0			910(819-1001)	1500		110
XKT10D821K	510	670	85.0			820(738-902)	1355		120
XKT10D781K	485	640	80.0			780(702-858)	1290		125
XKT10D751K	460	615	77.0			750(675-825)	1240		130
XKT10D681K	420	560	75.0			680(612-748)	1120		150
XKT10D621K	385	505	72.0			620(558-682)	1025		160
XKT10D561K	350	460	70.0			560(504-616)	925		180
XKT10D511K	320	415	69.0			510(459-561)	845		200
XKT10D471K	300	385	67.0			470(423-517)	775		210
XKT10D431K	275	350	65.0			430(387-473)	710		230
XKT10D391K	250	320	60.0			390(351-429)	650		260
XKT10D361K	230	300	47.0			360(324-396)	595		280
XKT10D331K	210	275	43.0			330(297-363)	550		300
XKT10D301K	190	250	40.0			300(270-330)	500		330
XKT10D271K	175	225	37.0			270(243-297)	455		370
XKT10D241K	150	200	35.0			240(216-264)	395		420
XKT10D221K	140	180	32.0			220(198-242)	360		450
XKT10D201K	130	170	30.0			200(180-220)	340		500
XKT10D181K	115	150	27.0			180(162-198)	300		560
XKT10D151K	95	125	22.0			150(135-165)	250		670
XKT10D121K	75	100	18.0			120(108-132)	200		830
XKT10D101K	60	85	15.0			100(90-110)	165		1000
XKT10D820K	50	65	12.0			82(73.8-90.2)	135		1200
XKT10D680K	40	56	8.2	500 / 250x2	0.05	68(61.2-74.8)	135	5	1500
XKT10D560K	35	45	7.0			56(50.4-61.6)	110		1800
XKT10D470K	30	38	5.5			47(42.3-51.7)	93		2100
XKT10D390K	25	31	4.6			39(35.1-42.9)	77		2400
XKT10D330K	20	26	4.0			33(29.7-36.3)	65		3000
XKT10D270K	17	22	3.0			27(24.3-29.7)	53		3700
XKT10D220K	14	18	2.5			22(19.8-24.2)	43		4500
XKT10D180K	11	14	2.1			18(16.2-19.8)	36		5600

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**Kingtronics**®**XKT****Metal Oxide Varistor****METAL OXIDE VARISTOR 14D Series****#680K—180K Max. Clamping Voltage Testing Current 10A.****SPECIFICATION**

Part No	Maximum allowable Voltage		Maximum Energy (10/1000µs) (J)	Maximum Peak Current (8/20µs)	Rated Power (W)	Varistor Voltage		Clamping Voltage (Max.)		Typical Capacitance (reference) @1KHz (pF)
	AC rms (V)	DC rms (V)				V <sub>1.0mA</sub> (V)	V <sub>c</sub> (V)	I <sub>p</sub> (A)		
XKT14D182K	1100	1465	250	4500 / 2500x2	0.6	1800(1620-1980)	2970	50	130	
XKT14D162K	1000	1280	243			1600(1440-1760)	2640		140	
XKT14D152K	930	1200	240			1500(1350-1650)	2475		145	
XKT14D142K	880	1140	238			1400(1260-1540)	2310		150	
XKT14D122K	750	990	232			1200(1080-1320)	1980		160	
XKT14D112K	680	895	213			1100(990-1210)	1815		180	
XKT14D102K	625	825	190			1000(900-1100)	1650		200	
XKT14D911K	550	745	175			910(819-1001)	1500		220	
XKT14D821K	510	670	157			820(738-902)	1355		240	
XKT14D781K	485	640	148			780(702-858)	1290		260	
XKT14D751K	460	615	143			750(675-825)	1240		270	
XKT14D681K	420	560	130			680(612-748)	1120		290	
XKT14D621K	385	505	128			620(558-682)	1025		320	
XKT14D561K	350	460	125			560(504-616)	925		360	
XKT14D511K	320	415	121			510(459-561)	845		390	
XKT14D471K	300	385	118			470(423-517)	775		430	
XKT14D431K	275	350	115			430(387-473)	710		460	
XKT14D391K	250	320	100			390(351-429)	650		510	
XKT14D361K	230	300	93.0			360(324-396)	595		560	
XKT14D331K	210	275	85.0			330(297-363)	550		610	
XKT14D301K	190	250	77.0			300(270-330)	500		670	
XKT14D271K	175	225	70.0			270(243-297)	455		740	
XKT14D241K	150	200	63.0			240(216-264)	395		830	
XKT14D221K	140	180	60.0			220(198-242)	360		900	
XKT14D201K	130	170	57.0			200(180-220)	340		1000	
XKT14D181K	115	150	50.0			180(162-198)	300		1100	
XKT14D151K	95	125	40.0			150(135-165)	250		1300	
XKT14D121K	75	100	32.0			120(108-132)	200		1700	
XKT14D101K	60	85	28.0	100(90-110)	165	2000				
XKT14D820K	50	65	22.0	82(73.8-90.2)	135	2400				
XKT14D680K	40	56	14.0	68(61.2-74.8)	135	2900				
XKT14D560K	35	45	11.0	56(50.4-61.6)	110	3600				
XKT14D470K	30	38	10.0	47(42.3-51.7)	93	4300				
XKT14D390K	25	31	8.6	39(35.1-42.9)	77	5100				
XKT14D330K	20	26	7.5	33(29.7-36.3)	65	6100				
XKT14D270K	17	22	6.0	27(24.3-29.7)	53	7400				
XKT14D220K	14	18	5.0	22(19.8-24.2)	43	9100				
XKT14D180K	11	14	4.0	18(16.2-19.8)	36	11100				

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**Kingtronics**®**XKT****Metal Oxide Varistor****METAL OXIDE VARISTOR 20D Series****#680K—180K Max. Clamping Voltage Testing Current 20A.****SPECIFICATION**

Part No	Maximum allowable Voltage		Maximum Energy (10/1000 $\mu$ s) (J)	Maximum Peak Current (8/20 $\mu$ s)	Rated Power (W)	Varistor Voltage $V_{1.0mA}$ (V)	Clamping Voltage (Max.)		Typical Capacitance (reference) @1KHz (pF)
	AC rms (V)	DC rms (V)					Vc (V)	Ip (A)	
XKT20D182K	1100	1465	625	6500 / 4500x2	1.0	1800(1620-1980)	2970	100	320
XKT20D162K	1000	1280	606			1600(1440-1760)	2640		330
XKT20D152K	930	1200	569			1500(1350-1650)	2475		335
XKT20D142K	880	1140	532			1400(1260-1540)	2310		340
XKT20D122K	750	990	408			1200(1080-1320)	1980		350
XKT20D112K	680	895	383			1100(990-1210)	1815		360
XKT20D102K	625	825	342			1000(900-1100)	1650		400
XKT20D911K	550	745	310			910(819-1001)	1500		440
XKT20D821K	510	670	282			820(738-902)	1355		500
XKT20D781K	485	640	265			780(702-858)	1290		510
XKT20D751K	460	615	255			750(675-825)	1240		530
XKT20D681K	420	560	230			680(612-748)	1120		600
XKT20D621K	385	505	224			620(558-682)	1025		650
XKT20D561K	350	460	215			560(504-616)	925		710
XKT20D511K	320	415	210			510(459-561)	845		780
XKT20D471K	300	385	204			470(423-517)	775		850
XKT20D431K	275	350	190			430(387-473)	710		930
XKT20D391K	250	320	180			390(351-429)	650		1000
XKT20D361K	230	300	163			360(324-396)	595		1100
XKT20D331K	210	275	150			330(297-363)	550		1200
XKT20D301K	190	250	136			300(270-330)	500		1300
XKT20D271K	175	225	127			270(243-297)	455		1500
XKT20D241K	150	200	108			240(216-264)	395		1650
XKT20D221K	140	180	100			220(198-242)	360		1800
XKT20D201K	130	170	95			200(180-220)	340		2000
XKT20D181K	115	150	85			180(162-198)	300		2200
XKT20D151K	95	125	70			150(135-165)	250		2700
XKT20D121K	75	100	55			120(108-132)	200		3300
XKT20D101K	60	85	50			100(90-110)	165		4000
XKT20D820K	50	65	45			82(73.8-90.2)	135		4900
XKT20D680K	40	56	41			68(61.2-74.8)	135		5800
XKT20D560K	35	45	38			56(50.4-61.6)	110		6500
XKT20D470K	30	38	30			47(42.3-51.7)	93		7400
XKT20D390K	25	31	26	39(35.1-42.9)	77	8500			
XKT20D330K	20	26	23	33(29.7-36.3)	65	11500			
XKT20D270K	17	22	16	27(24.3-29.7)	53	13000			
XKT20D220K	14	18	14	22(19.8-24.2)	43	18500			
XKT20D180K	11	14	11	18(16.2-19.8)	36	28500			

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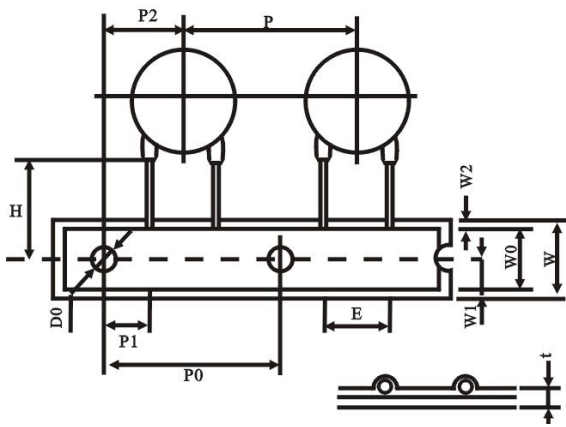
# Kingtronics®

# XKT

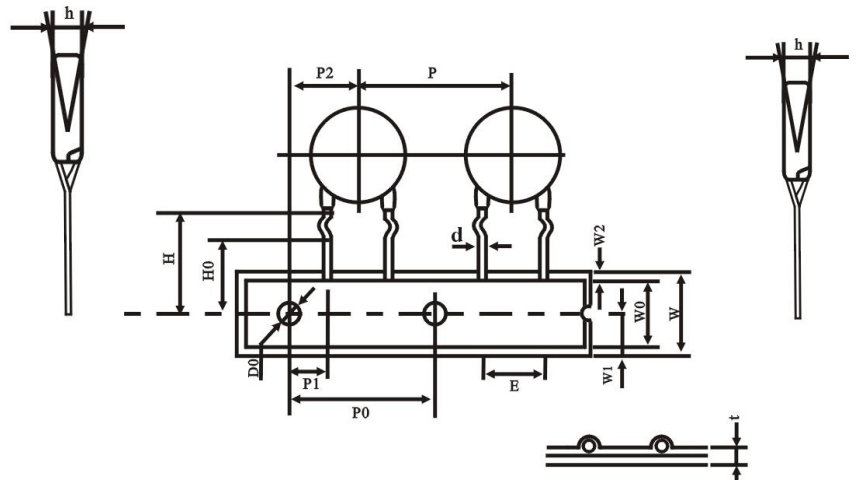
## Metal Oxide Varistor

### METAL OXIDE VARISTOR TAPING SPECIFICATION

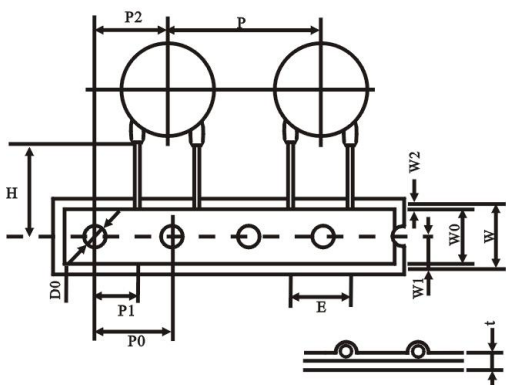
**Straight Leads (D05, D07)**



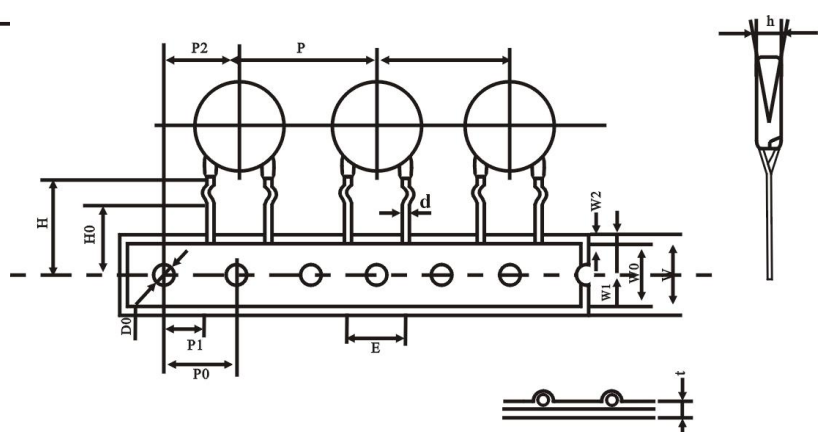
**Crimped Leads (D05, D07)**



**Straight Leads (D10, D14)**



**Crimped Leads (D10, D14)**



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**Kingtronics**®**XKT****Metal Oxide Varistor****METAL OXIDE VARISTOR TAPING SPECIFICATION**

Symbol	Parameter	05D	07D	10D	14D
<b>P</b>	Pitch Component	12.7±1.0	12.7±1.0	25.4±1.0	25.4±1.0
<b>P0</b>	Feed Hold	12.7±0.3	12.7±0.3	12.7±1.0	12.7±1.0
<b>P1</b>	Feed Hold Center to Lead	3.85±0.7	3.85±0.7	8.95±1.5	8.95±1.5
<b>P2</b>	Hold Center to Component Center	6.35±1.3	6.35±1.3	12.7±1.5	12.7±1.5
<b>E</b>	Lead to Lead Distance	5.0±0.8	5.0±0.8	7.5±0.8	7.5±0.8
<b>W</b>	Tape Width	18.0+1.5/-1.0	18.0+1.5/-1.0	18.0+1.0/-0.5	18.0+1.0/-0.5
<b>W0</b>	Hold Down Tape Width	10±0.5	10±0.5	10±0.5	10±0.5
<b>W1</b>	Hold Position	9.0+0.75/-0.5	9.0+0.75/-0.5	9.0±0.75	9.0±0.75
<b>W2</b>	Hold Down Tape Position	3.0max	3.0max	3.0max	3.0max
<b>H</b>	Height from Tape Center to Component	20.0±2.0	20.0±2.0	20.0±2.0	20.0±2.0
<b>H0</b>	Height from Tape Center to Component	16.0±1.0	16.0±1.0	16.0±1.0	16.0±1.0
<b>t</b>	Total Tape Thickness	0.6±0.3	0.6±0.3	0.6±0.3	0.6±0.3
<b>Δh</b>	Component Alignment	0±2.0	0±2.0	0±2.0	0±4.0
<b>D0</b>	Feed Hold Diameter	4.0±0.2	4.0±0.2	4.0±0.2	4.0±0.2

**Unit : mm**

Note: Specifications are subject to change without notice.

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