

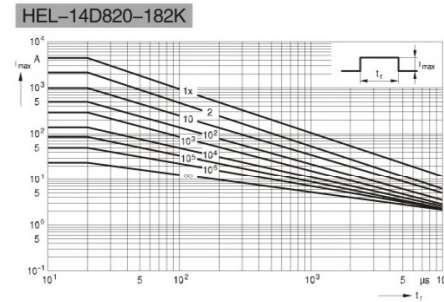
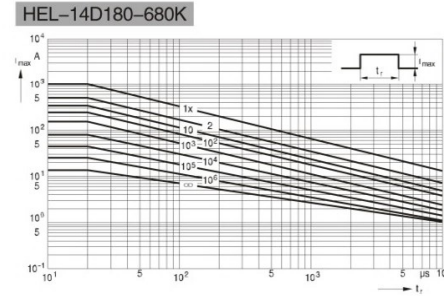
14D系列 HEL 压敏电阻 HEL VARISTOR WITH 14MM DIAMETER

型号规格 Part No.	压敏电压 Varistor Voltage		最大允许 使用电压 Maximum Allowable Voltage		最大限制 电压 Maximum Clamping Voltage		通流容量 Withstanding Surge Current (8/20 μs) 1 time		静态功率 Rated Wattage		能量容量 Energy (2ms)		静态电容量 (参考值) Typical Capacitance
	V <sub>1mA</sub> (V)	AC (V)	DC (V)	V <sub>50A</sub> (V)	K class (A)	KJ class (A)	(W)	K (J)	KJ (J)	1kHz (PF)			
HEL-14D180	18	(16-20)	11	14	· 38	1000	2000	0.1	3.2	4.1	18,000		
HEL-14D220	22	(20-24)	14	18	· 43	1000	2000	0.1	4.0	5.0	15,000		
HEL-14D270	27	(24-30)	17	22	· 53	1000	2000	0.1	4.9	6.1	10,000		
HEL-14D330	33	(30-36)	20	26	· 65	1000	2000	0.1	5.9	7.4	8,500		
HEL-14D390	39	(35-43)	25	31	· 77	1000	2000	0.1	7.0	8.8	7,500		
HEL-14D470	47	(42-52)	30	38	· 93	1000	2000	0.1	8.5	10.6	6,500		
HEL-14D560	56	(50-62)	35	45	· 110	1000	2000	0.1	10.1	12.6	5,600		
HEL-14D680	68	(61-75)	40	56	· 135	1000	2000	0.1	12.2	15.3	4,700		
HEL-14D820	82	(74-90)	50	65	135	4500	6000	0.6	14.8	18.5	3,900		
HEL-14D101	100	(90-110)	60	85	165	4500	6000	0.6	18.0	22.5	3,400		
HEL-14D121	120	(108-132)	75	100	200	4500	6000	0.6	21.6	27.0	3,100		
HEL-14D151	150	(135-165)	95	125	250	4500	6000	0.6	27.0	33.8	3,000		
HEL-14D181	180	(162-198)	115	150	300	4500	6000	0.6	32.4	40.5	1,030		
HEL-14D201	200	(185-225)	130	170	340	4500	6000	0.6	36.0	45.0	970		
HEL-14D221	220	(198-242)	140	180	360	4500	6000	0.6	39.6	49.5	840		
HEL-14D241	240	(216-264)	150	200	395	4500	6000	0.6	43.2	54.0	710		
HEL-14D271	270	(243-297)	175	225	455	4500	6000	0.6	48.6	60.8	650		
HEL-14D301	300	(270-330)	195	250	505	4500	6000	0.6	54.0	67.5	600		
HEL-14D331	330	(297-363)	210	275	550	4500	6000	0.6	59.4	74.3	550		
HEL-14D361	360	(324-396)	230	300	595	4500	6000	0.6	64.8	81.0	500		
HEL-14D391	390	(351-429)	250	320	650	4500	6000	0.6	70.2	87.8	480		
HEL-14D431	430	(387-473)	275	350	710	4500	6000	0.6	77.4	96.8	440		
HEL-14D471	470	(423-517)	300	385	775	4500	6000	0.6	84.6	105.8	420		
HEL-14D511	510	(459-561)	320	418	842	4500	6000	0.6	84.6	105.8	390		
HEL-14D561	560	(504-616)	350	460	920	4500	6000	0.6	84.6	105.8	360		
HEL-14D621	620	(558-682)	385	505	1,025	4500	6000	0.6	84.6	105.8	320		
HEL-14D681	680	(612-748)	420	560	1,120	4500	6000	0.6	84.6	105.8	290		
HEL-14D751	750	(675-825)	460	615	1,240	4500	6000	0.6	90.0	112.5	260		
HEL-14D781	780	(702-858)	485	640	1,290	4500	6000	0.6	93.6	117.0	230		
HEL-14D821	820	(738-902)	510	670	1,355	4500	6000	0.6	98.4	123.0	230		
HEL-14D911	910	(819-1001)	550	745	1,500	4500	6000	0.6	109.2	136.5	200		
HEL-14D951	950	(855-1045)	580	780	1,570	4500	6000	0.6	113.7	142.1	190		
HEL-14D102	1000	(900-1100)	625	825	1,650	4500	6000	0.6	120.0	150.0	180		
HEL-14D112	1100	(990-1210)	680	895	1,815	4500	6000	0.6	132.0	165.0	150		
HEL-14D152	1500	(1350-1650)	900	1220	2,475	4500	6000	0.6	179.0	223.0	140		
HEL-14D182	1800	(1620-1980)	1,000	1,465	2,970	4500	6000	0.6	216.0	270.0	120		

• The clamping voltage from 180K to 680K is tested with current 10A,  
Note: The energy (10/1000 μs) is about 1.4 times of energy (2ms).  
• 180K至680K最大限制电压测试电流是10A。  
注: 10/1000 μs的能量容量值约为2ms能量容量值的1.4倍

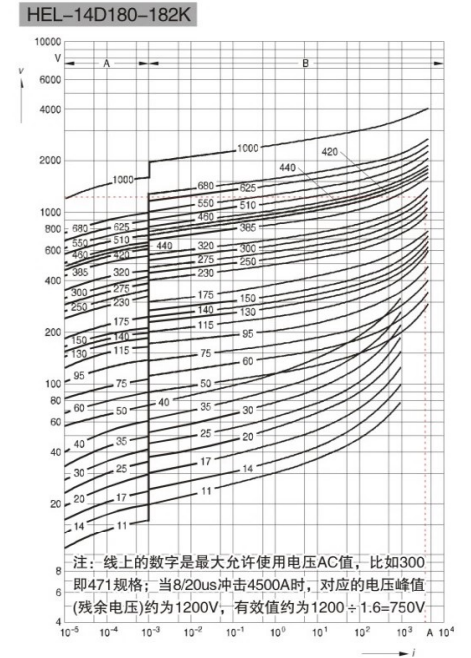
降额曲线图 Derating curves

横轴是冲击时间即浪涌波型宽度，纵轴是冲击电流峰值，  
线上的数字是冲击次数；  
Maximum surge current  $I_{max} = f(t_r, \text{pulse train})$



伏安特性图 v/i characteristics

A区是泄漏电流区，A = Leakage current,  
B区是冲击电流与限制电压对应区  
B = Protection level for worst-case varistor tolerances



产品尺寸 DIMENSION

单位Unit: mm

产品外型 Product Shape	系列 Series	压敏电压 Varistor Voltage	厚度 Tmax
	14D	18V-39V	7.5
		47V-68V	8.0
		82V-150V	8.5
		180V-270V	9.0
		330V-390V	9.5
		430V-560V	10.0
		620V-780V	10.5
		820V-1200V	11.0
		1300V-1500V	11.5
		1600V-1800V	12.0