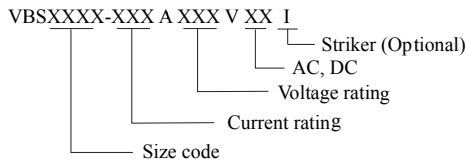




Ordering Information:



Description:

VBS series semiconductor protection fuse is a kind of british style fast-acting fuse designed to provide protection for semiconductor

Features:

- . Designed according to IEC60269-4/-4,BS88.4
- . Complying with CE and RoHS
- . UL/CUL certified(File No. E356490)
- . Operating class: aR or gR

Ratings:

- Voltage Rating: 690V AC / 250V AC / 700V AC/150V DC / 450V DC
- Current Rating: 5A-105A
- Interrupt Rating: 160kA@250V AC
100kA@250V AC
200kA@690V AC
50kA@700V AC
20kA@150V DC
20kA@450V DC

Mechanical Dimensions:

Size Code	Size of Fuse Body	Suheme
1028	10(D)×28 (L)	
1727	17(D)×27 (L)	
3627	36(D)×27 (L)	
1051	10(D)×51 (L)	
1749	17(D)×49 (L)	
3655	36(D)×55 (L)	

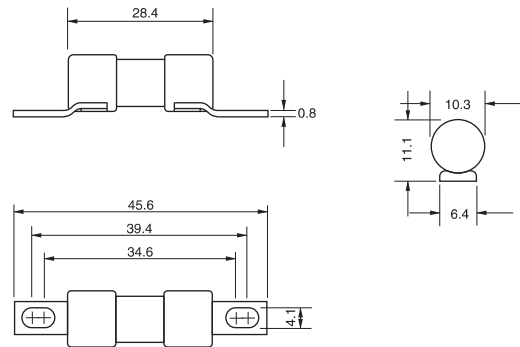


Fig.1 VBS1028

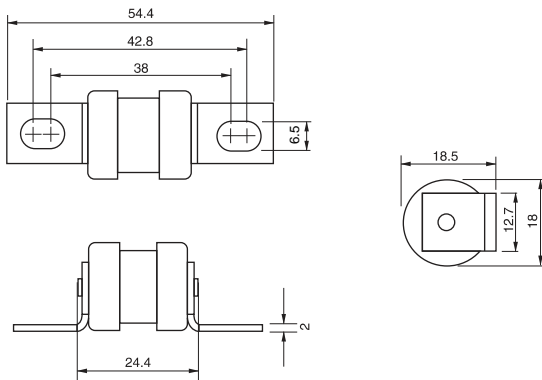


Fig.2 VBS1727

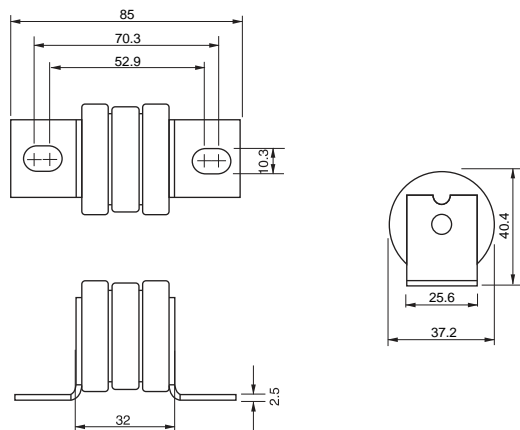


Fig.3 VBS3627

● Mechanical Dimensions:

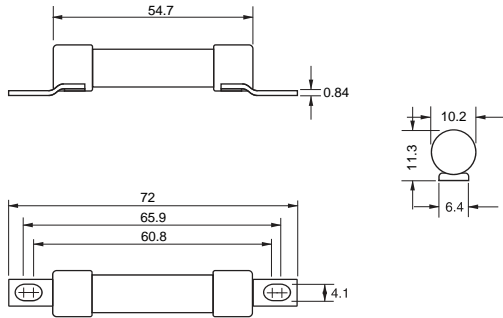


Fig.4 VBS1051

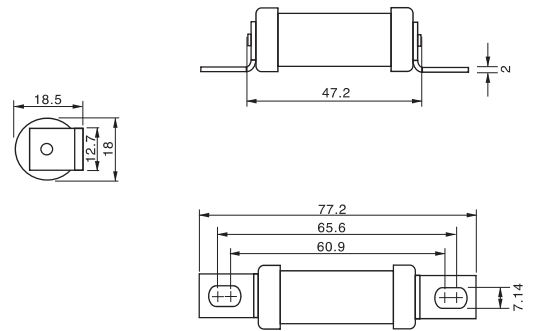


Fig.5 VBS1749

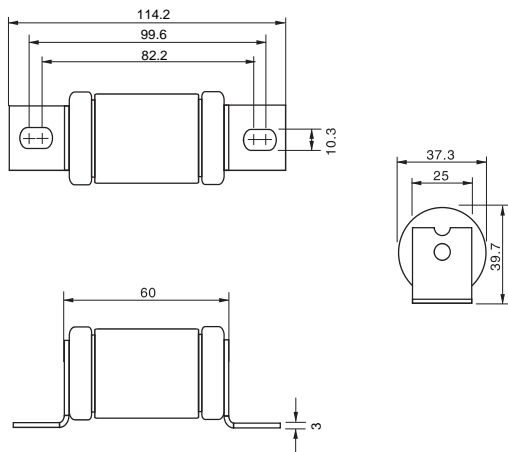


Fig.6 VBS3655

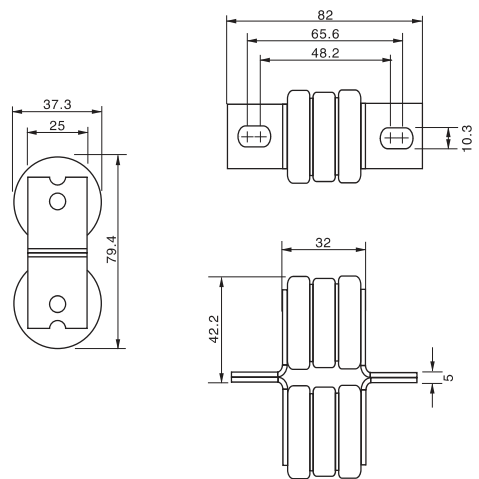


Fig.7 2xVBS3627

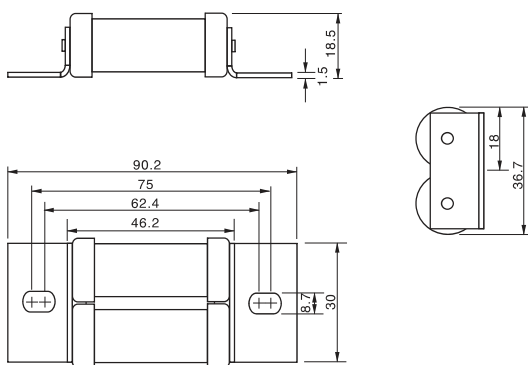


Fig.8 2xVBS1749

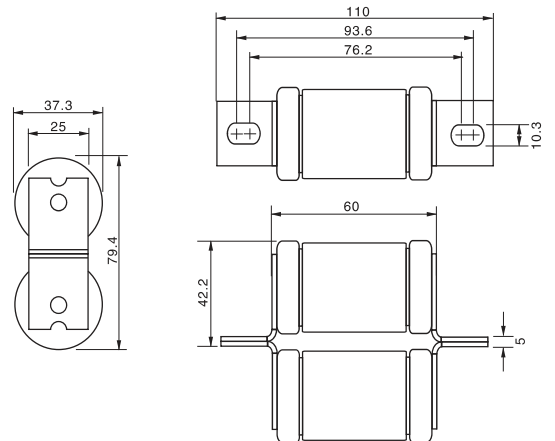


Fig.9 2xVBS3655

● **Electrical Specifications:**

Catalog Numbers	Current Rating(A)	Pre-arc I ² t(A ² S)	Clearing I ² t(A ² S)	Power Loss (W)	Voltage Rating	Interrupt Rating	Note		
VBS1028	5	1.3	10.5	1	250V AC 150V DC	160kA@250V AC 20kA@150V DC	gR		
	6	1.7	14	1.2					
	10	2.3	19	2.1					
	12	4.2	30	2.8					
	15	6.6	45	3.5					
	20	14.9	89	4.0					
	25	26.8	145	4.6					
32	52.8	260	5.3						
VBS1727	7	1.3	9	1			250V AC 150V DC	160kA@250V AC 20kA@150V DC	aR
	10	4.5	22	1.5					
	12	5.8	29	2.0					
	16	11.1	54	3.0					
	20	15.5	90	3.9					
	25	29.9	141	4.7					
	30	44.9	215	5.5					
	35	62.9	300	6.4					
	50	179.8	920	8.7					
	60	249.8	1200	10.3					
	75	379.5	1780	13.5					
	80	472	2300	13.6					
	100	721	3600	11.4					
	125	832	6200	12.2					
150	1230	8800	13.5						
160	1700	10500	15.5						
180	2000	15500	16.9						
VBS3627	50	118	500	9.5			250V AC 150V DC	100kA@250V AC 20kA@150V DC	gR/aR
	75	328	1370	12.5					
	100	731	3020	15.6					
	125	1300	5450	18.1					
	150	1900	7900	21.5					
	200	3980	16300	26.4					
	250	5120	29500	31.5					
	300	7000	48500	36.4					
	350	17850	73200	41.2					
	400	24600	125000	46.0					
	450	33000	165000	53.3					
	500	42000	212000	58.6					
	525	47500	243000	65.0	aR				

● **Electrical Specifications:**

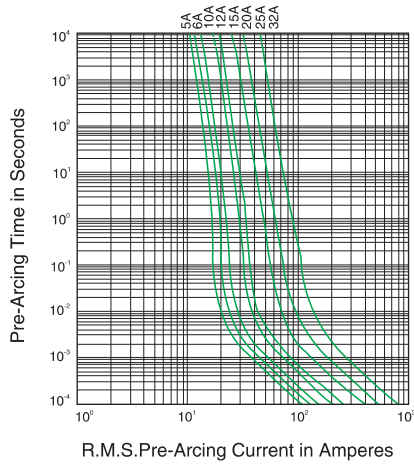
Catalog Numbers	Current Rating(A)	Pre-arc I ² t(A ² S)	Clearing I ² t(A ² S)	Power Loss (W)	Voltage Rating	Interrupt Rating	Note
VBS1051	5	1.3	12	2	690V AC 700V AC 450V DC	200kA@690V AC 50kA@700V AC 20kA@450V DC	gR
	6	1.3	17	2.4			
	10	3.2	30	4.0			
	12	5.4	50	4.2			
	15	9.6	80	4.3			
	20	19.2	160	5.7			
VBS1749	12	4.1	30	3.5			
	16	9.5	64	4.0			
	20	17	108	5.4			
	25	26.5	165	8.0			
	32	52.1	320	8.9			
	35	33.5	221	9.4			
	40	52.3	303	10.4			
	45	78.6	456	11.4			
	50	108.3	605	12.6			
	63	138.2	761	14.2			
	71	222	975	18.3			
	80	256	1580	21.2			
	90	372	2150	21.8			
	100	496	2870	24.0			
VBS3655	50	178	900	13.8	aR		
	65	330	1700	17			
	85	478	3650	23.4			
	90	710	4400	25			
	110	1110	6600	26.8			
	150	2840	13000	35			
	180	5300	24000	35.6			
	200	9500	43000	33			
	250	21000	100000	34			
	280	28500	130000	37.8			
	315	37600	163000	42.1			
	355	47600	195000	48			
	400	71200	280000	49.8			

● **Electrical Specifications:**

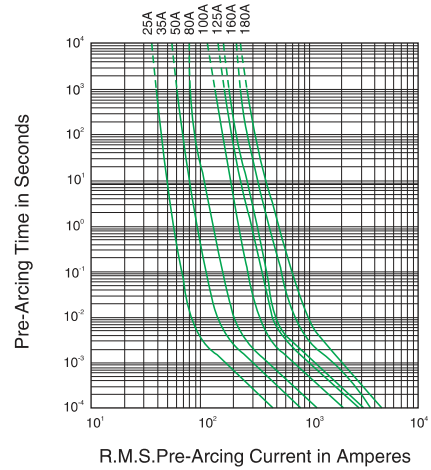
Catalog Numbers	Current Rating(A)	Pre-arc I ² t(A ² S)	Clearing I ² t(A ² S)	Power Loss (W)	Voltage Rating	Interrupt Rating	Note
2×VBS3627	300	7650	31600	43	250V AC 150V DC	100kA@250V AC 20kA@150V DC	aR
	350	11200	48500	48			
	400	15600	65400	53.5			
	500	29000	116000	65			
	600	48000	198000	74			
	700	71500	275000	83.6			
	800	99500	511000	93			
	900	133000	678000	108			
	1000	170000	871000	121.4			
	1050	190000	970000	132.5			
2×VBS1749	65	205	1700	17	690V AC 450V DC	200kA@690V AC 20kA@450 DC	gR
	75	305	2700	20			
	85	425	3500	21.8			
	90	250	4300	22.6			
	110	940	6200	26.2			
	140	1700	13000	28.2			
	150	2050	15000	28.6			
	160	2450	18000	31.4			
2×VBS3655	175	2850	14500	47	690V AC 450V DC	200kA@690V AC 20kA@450 DC	gR
	200	4700	27000	33.0			
	235	6900	39000	37.6			
	300	13600	67000	48.6			
	325	21300	95000	53.2			
	355	25000	110000	61.5			
	400	21200	120000	62.3			
	450	65100	320000	63			
	500	85200	410000	68.4			
	630	151000	660000	85			
	710	192000	800000	96.5			
	800	281000	1220000	99			

● **Electrical Characteristics:**

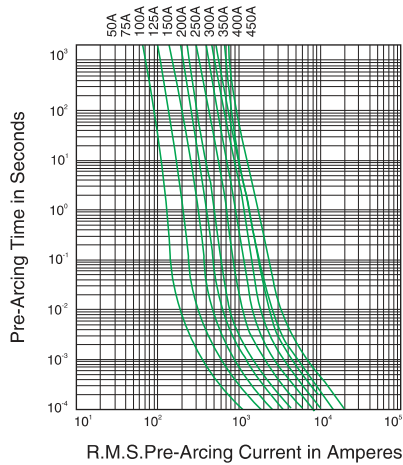
Average Time-Current Curve for VBS1028



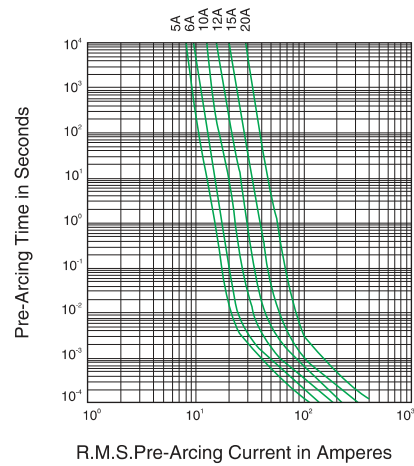
Average Time-Current Curve for VBS1727



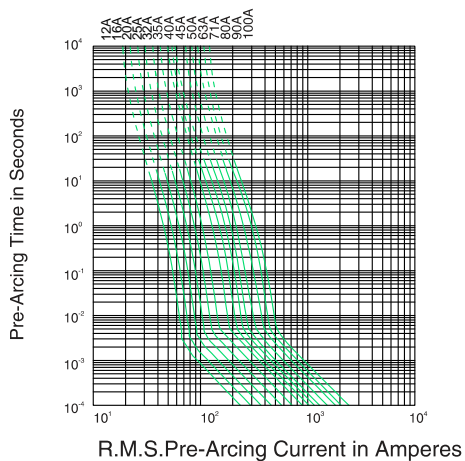
Average Time-Current Curve for VBS3627



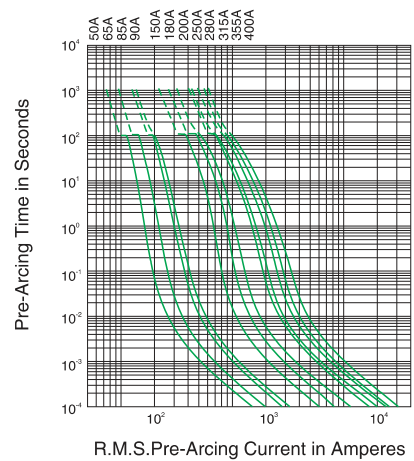
Average Time-Current Curve for VBS1051



Average Time-Current Curve for VBS1749

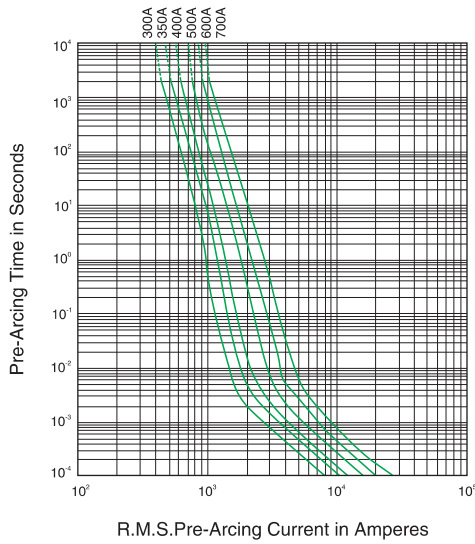


Average Time-Current Curve for VBS3655

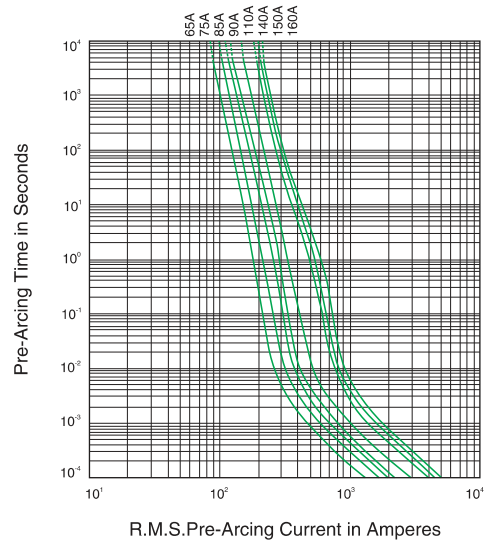


● **Electrical Characteristics:**

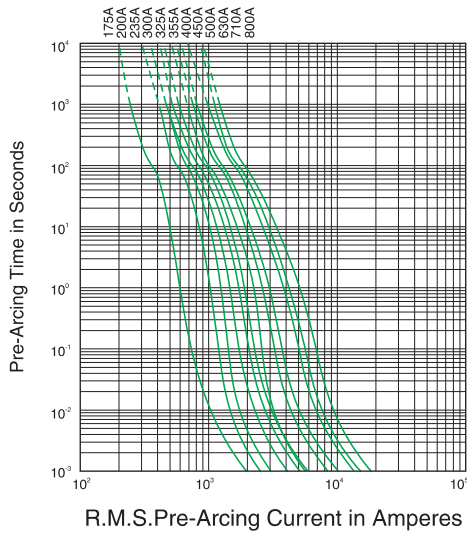
Average Time-Current Curve for 2×VBS3627



Average Time-Current Curve for 2×VBS1749



Average Time-Current Curve for 2×VBS3655



■ Temperature Correction Curve Kc

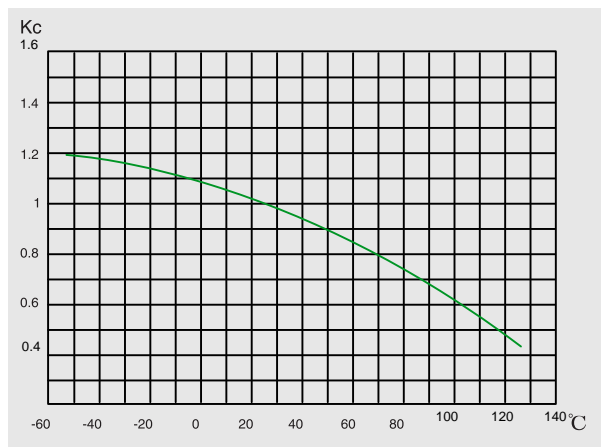
The rated current value of our fuses is based on the ambient temperature in the space below the fuse of 25°C up to 30°C max. The following graph gives correction factors Kc for a range of temperatures -55°C to +125°C.

Altitude: IEC defines normal atmospheric operating conditions. Regarding the altitude, it's generally below 2000M. For altitude above 2000M, the fuse's rated current is derated by 0.5% every 100M.

■ 温度折减率曲线Kc

熔断器的额定电流定义在温度为20°C最大不超过30°C，左图给出了从-55°C到+125°C时的温度修正曲线。

高海拔对熔断器的使用影响：IEC标准规定，熔断器在海拔2000米下使用性能不受影响；高过2000米海拔高度，每升高100米，熔断器的额定电流减少0.5%-1%



- The operating temperature are -5°C to +40°C; The equable value of ambient air temperature must not exceed 35°C with in 24 hours;