

Appendix 1 Overview of Littlefuse 5x20mm Fuse-links

	F				M				T				
	216	217	231	235	232	233	234	237	213	215	218	219	239
Rated Current	50mA to 10A	32mA to 15A	1A to 15A	100mA to 6A	500mA to 10A	1A to 6.3A	1A to 10A	1A to 10A	200mA to 5A	200mA to 10A	32mA to 15A	125mA to 6.3A	200mA to 5A
Rated Voltage	250	250	125 and 250	250<=3.15A 125>4A	125 and 250	250<=3.15A 125>4A	250	125	250	250	250	250	250<=3.15A 125>4A
Breaking Capacity (all V is ac)	1500A 250V	35A<=3.15A 10In>4A to Max. 63A 250V	500A 125V 100A 250V	10000A 125V 100A 250V	500A 125V 100A 250V	10000A 125V 100A 250V	10000A/12V 100A/250V <3.15A 200A/250V >4A	10000A/125V	35A<=3.15A 10In>4A 250V	1500A 250V	35A<=3.15A 10In>4A 250V	150A 250V	10000A 125V 100A 250V
Glass Body		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Ceramic Body	✓									✓			
Kitemark	1A to 6.3A	400mA to 6.3A							✓	1A to 6.3A	80mA to 6.3A	125mA to 6.3A	
Semko	50mA to 6.3A	32mA to 6.3A							✓	1A to 6.3A	32mA to 6.3A	125mA to 6.3A	
VDE	50mA to 6.3A	50mA to 6.3A							✓	1A to 6.3A	80mA to 6.3A	125mA to 6.3A	
Kema Keur	50mA to 6.3A	32mA to 6.3A							✓	1A to 6.3A	32mA to 6.3A	125mA to 6.3A	
UL/CSA 248				✓		✓	✓	✓					✓
Underwriters Recognised	✓	32mA to 6.3A							✓	✓	32mA to 10A	800mA to 6.3A	
Miti 'A'				1A to 6A		✓	✓	✓		1A to 10A			
Miti 'B'			✓		1A to 10A								

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Appendix 2 Cross Reference

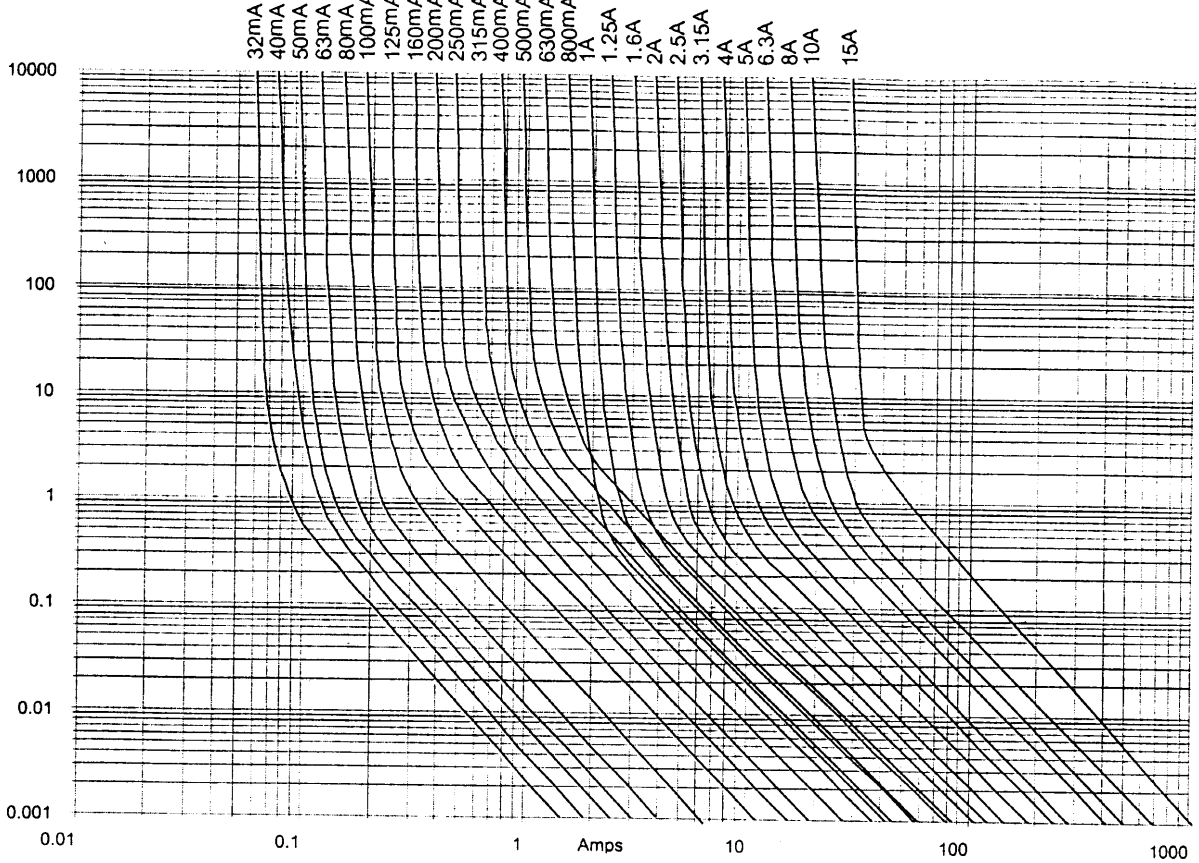
LITTEFUSE	CHARACTERISTICS	BEL	BUSSMAN	TRIAD	WICKMAN	S.O.C	NIPPON SEISEN	SCHURTER	NAGASAWA	PUDENZ	SAM-HWA
235 Series	Fast Acting	5MF	GMA	51NM	19197	MQ2, MQ4	FBM	FSQ	GGG		51M, 51NM
236 Series	235 With Lead	5MFP	GMA-V	52NM(B)		MQ1, 3, 5 & 7	FCM		GHS		52M, 52NM
233 Series	Semi Time-Lag	5MT	GMC	51MS		(UL) TSC, (UL)ET	FBT		SB		51S, 51MT
233 Pigtailed	With Lead	5MTP	GMC-V	52MS		(UL) TSCR, MT3	FCT		SBR		52S, 52MT
239 Series	Slow Bow	5TT	GMD	51S	19198	SD6		FSD		115, 1141	51T, 51SB
238 Series	239 With Lead	5TTP	GMD-V	52S		SD5					52T, 52SB

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216 Series	'F' Sheet 1 HBC	5HF	S501/GDA	50CF	19194			SP		113, 1123	55F
217 Series	'F' Sheet 2 LBC	5SF	S500/GDB	50F	19193	SEQ, BEQ		FSF	ES2	113, 1121	5F
218 Series	'T' Sheet 3 LBC	5ST	S504/GDC	50T	19195	SET, BET		FST	ES3	113, 1149	5T (B)
213 Series	'T' Sheet 3 LBC	5ST	S506/GDC		19195					113, 1141	5T (A)
215 Series	'T' Sheet 5 HBC	5HT	S505	50CT	19181	HT		SPT			55T
219 Series	'T' Sheet 6 EBC		S508		19196						

231 Series	Miti 'B'		FGMB	51NR		SC	FBR		MF51NR		51R
232 Series	Miti 'B' Semi-Time Lag		FGMT5			TSC	FBU		SV		
231 Pigtailed	With Lead		FGMLB	52NR		SCR	FCR		MF52NR		52R
232 Pigtailed	With Lead		FGMLT5			TSCR	FCU				

218 Time/Current Curve



218 Time-Lag LBC IEC127-2 ss3

Littelfuse Part No.	Ampere Rating	Approvals	Millivolt drop		Resistance (Ohm)		I ² t		Max. Sust. Watts Dissip.
			IEC Limit	LF Limit	min.	max.	min.	max.	
218.032	32mA	KS RC	5000	3200	48.3	68.6	0.0027	0.0034	1.6
218.040	40mA	KS RC	4000	2300	31	40.4	0.0049	0.0061	1.6
218.050	50mA	KS RC	3500	2100	19.2	27.4	0.0063	0.0079	1.6
218.063	63mA	KS RC	3000	1900	15	21.2	0.01	0.014	1.6
218.080	80mA	KSBVRC	3000	1400	10.8	14.4	0.023	0.03	1.6
218.100	100mA	KSBVRC	2500	1450	7	10.9	0.044	0.055	1.6
218.125	125mA	KSBVRC	2000	800	3.64	5.18	0.13	0.17	1.6
218.160	160mA	KSBVRC	1900	545	2	2.88	0.2	0.25	1.6
218.200	200mA	KSBVRC	1500	400	1.4	1.8	0.31	0.39	1.6
218.250	250mA	KSBVRC	1300	350	0.9	1.2	0.5	0.61	1.6
218.315	315mA	KSBVRC	1100	385	0.735	0.96	1.02	1.26	1.6
218.400	400mA	KSBVRC	1000	350	0.44	0.63	1.22	1.5	1.6
218.500	500mA	KSBVRC	900	275	0.315	0.425	2.61	3.19	1.6
218.630	630mA	KSBVRC	300	250	0.225	0.325	4.32	5.28	1.6
218.800	800mA	KSBVRC	250	71	0.065	0.081	1.79	2.19	1.6
218001.	1A	KSBVRC	150	68	0.0475	0.0615	2.99	3.66	1.6
2181.25	1.25A	KSBVRC	150	68	0.0375	0.0455	5.22	6.38	1.6
21801.6	1.6A	KSBVRC	150	63	0.028	0.036	9.52	11.7	1.6
218002.	2A	KSBVRC	150	73	0.0261	0.0325	13.3	16.3	1.6
21802.5	2.5A	KSBVRC	120	75	0.02	0.0245	21.4	26.3	1.6
2183.15	3.15A	KSBVRC	100	72	0.0155	0.019	35.2	43.2	1.6
218004.	4A	KSBVRC	100	68	0.0112	0.0142	63.8	78.1	1.6
218005.	5A	KSBVRC	100	66	0.009	0.0115	102	126	1.6
21806.3	6.3A	KSBVRC	100	62	0.0065	0.0085	183	225	1.6
218008.	8A	RC	-	66	0.0052	0.0067	315	386	4
218010.	10A	RC	-	59	0.0035	0.0055	524	642	4
218015.	15A	-	-	58	0.0025	0.0035	1297	1586	5

limits for pre-arcing time										
	1.5In		2.1In		2.75In		4In		10In	
	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
32mA-100mA	1hour	120s	200ms	10s	40ms	3s	10ms	300ms		
125mA-6.3A	1hour	120s	600ms	10s	150ms	3s	20ms	300ms		
8A-15A	1hour@1In	120s	600ms	10s	150ms	3s	20ms	300ms		

breaking capacity 35A or 10In(max. 100A) at 250Vac pf>0.9