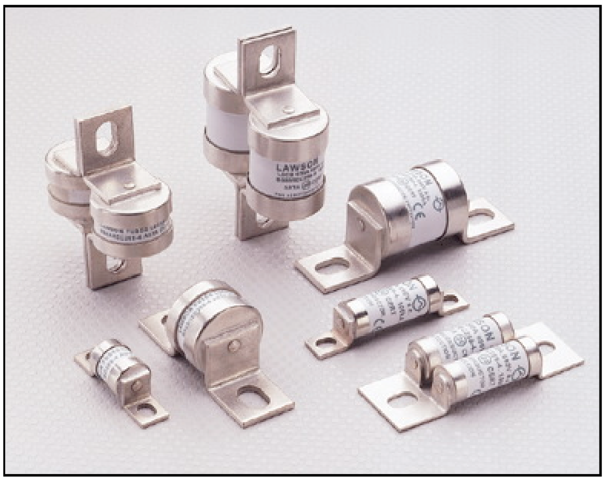
LAWSON FUSES

Fuse-links for the protection of semiconductor devices act very rapidly to interrupt overcurrents since the devices are highly susceptible to fault conditions. To minimize the fault current let-through into the device the fuse-links are designed for high speed operation. The fuse-links are essentially short circuit protection devices with the classification 'aR'. They exhibit higher temperatures at rated current than equivalent fuse-links of classification' gG', used in industrial or commercial installations, which are tolerant of transient faults and have a longtime overload capacity.

Semiconductor devices are also susceptible to overvoltages and therefore the voltage rating of the protective fuse-link should be matched to the voltage rating of the device to minimize the arcing overvoltage generated during fuse-link operation.

ASTA CERTIFICATION SERVICES



ASTA CERTIFICATION SERVICES

Lawson Fuses have introduced a comprehensive range of Hi-Speed Fuse-Links to British Standards. The 240 and 690 volt series comply with the performance and dimensional requirements of BS88: Part 4 and IEC 60269-4. These fuse-links are manufactured by Lawson Fuses in the UK ensuring that the manufacturing processes are within the Quality Management Systems assessed and approved by ASTA Certification Services as complying with ISO 9002. This British Standard range has been independently Certified by ASTA.

Trip indicators are available for use in parallel with the main fuse-link and can be attached to the associated fuse-link or mounted separately in panel-mounted fuse-clips.

Alternative ranges of semiconductor protection fuse-links to European and North American specifications are available in both the NH knife blade and cylindrical style configurations. These fuse-links are suitable for inserting in fuse-clips, fuse-holders and fuse-switches. Details of fuse-links for special applications are available from our help desk.

LAWSON SEMICONDUCTOR PROTECTION FUSE-LINKS

Index

Quality

Lawson Fuses operates a Quality Management System which has been independently assessed and approved by ASTA Certification Services as complying with ISO 9002 and is supported by the issue of Certificate No. 11050. Lawson manufactured fuse-links have been independently certified by ASTA and where appropriate comply with the the rules of the latest ASTA 20 Scheme, which authorises Lawson Fuses to endorse those products "ASTA ⑳ CERT"

For details of products other than Semiconductor Protectrion Fuse-Links, please ask for other publications.

ASSURED QUALITY

BRITISH STANDARD
MADE IN THE UK

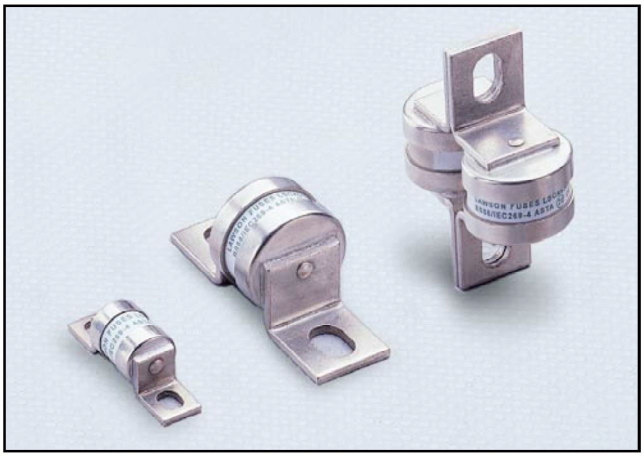
QUALITY ASSESSED
ASTA
ISO 9002
CERT NO. 11050

UKAS
QUALITY MANAGEMENT
010

SEMICONDUCTOR PROTECTION FUSE-LINKS WITH BOLTED CONNECTIONS TYPE LSCA

Semiconductor protection fuse-links to BS88: Part 4 • IEC60269-4

Rated voltages: 240V a.c., 120V d.c., Rated breaking capacities: 100kA at 240V a.c., 100kA at 120V d.c..



The 240 volt series complies with the performance and dimensional requirements of BS88: Part 4 and IEC60269-4. These fuse-links are manufactured in the UK under the quality assurance systems employed by Lawson Fuses.

Indicators

Trip indicators are available for use in parallel with the main fuse-link and can either be attached to the associated fuse-link or mounted separately in panel mounted fuse-clips. A push-on adaptor and micro switch attachment is available for use with the trip indicator to give the facility of remote indication.

OUTLINE DIMENSIONS TYPE LSCA

Figure 1

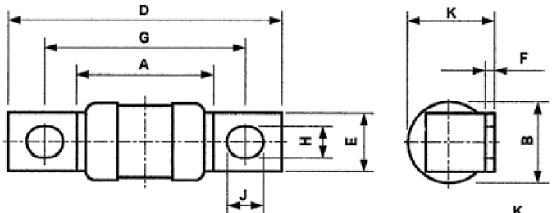
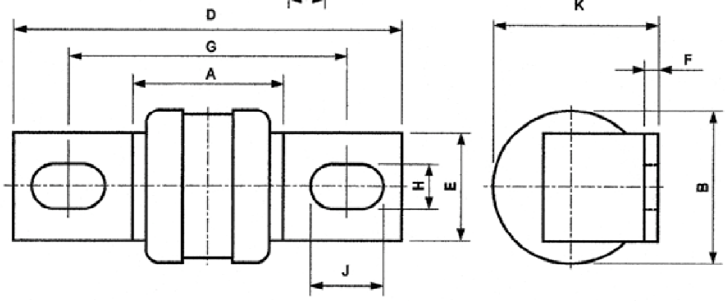


Figure 2



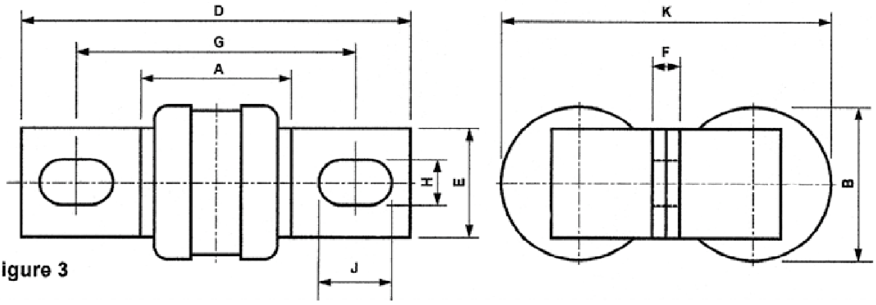


Figure 3

Current Ratings (Amps)	Figure No.	Dimensions in millimetres								
		A max.	B max.	D max.	E nom.	F max.	G nom.	H nom.	J min.	K max.
10-180	1	29.2	17.7	58.4	12.7	2.5	41.8	6.4	7.9	19.3
125-450	2	32.6	38.2	85.0	25.4	3.3	59.0	10.3	13.0	41.5
300-900	3	32.6	38.2	85.0	25.4	6.4*	59.0	10.3	13.0	83.0

* Nominal.

For operating characteristics see page 8

Product detail - 240V Fuse-Links

Voltage Rating a.c. Volt	Current Rating Amps	List Reference	Pre Arcing I^2t A^2sec	Total I^2t at 240V A^2sec	Power Dissipation at I_N Watts	Dimensional Reference
240	10	LSCA10	5	26	0.85	Page 4, Figure 1
	12	LSCA12	8	45	0.9	
	16	LSCA16	16	85	1.1	
	20	LSCA20	27	140	1.4	
	25	LSCA25	45	240	1.7	
	30	LSCA30	80	420	1.9	
	32	LSCA32	80	420	2.2	
	35	LSCA35	95	500	2.3	
	40	LSCA40	120	650	2.8	
	50	LSCA50	230	1200	3.3	
	60	LSCA60	360	1900	4.0	
	63	LSCA63	360	1900	4.3	
	70	LSCA70	470	2500	5.0	
	75	LSCA75	530	2800	5.7	
	80	LSCA80	580	3100	6.0	
	85	LSCA85	660	3500	6.6	
	100	LSCA100	950	5000	7.5	
	125	LSC125	1050	5500	12.0	
	160	LSC160	1200	6500	19.5	
	180	LSC180	1600	8700	24.0	
	125	LSCA125	1300	7000	9.0	Page 4, Figure 2
	140	LSCA140	1700	9000	10.0	
	150	LSCA150	2000	10700	11.0	
	160	LSCA160	2300	12500	12.0	
	175	LSCA175	2600	13800	13.0	
	180	LSCA180	2900	15400	14.5	
	200	LSCA200	3500	18500	16.5	
	225	LSCA225	4200	22000	18.5	
	250	LSCA250	5200	27500	20.0	
	260	LSCA260	5700	30000	22.0	
	300	LSCA300	7500	39000	25.0	
	315	LSCA315	8100	42500	28.4	
	350	LSC350	12800	67000	29.0	
	355	LSC355	12800	67000	30.0	
	400	LSC400	14900	78000	38.0	
	450	LSC450	18400	96000	44.5	
	300	LSC300	8000	42000	26.0	Page 4, Figure 3
	315	LSC315	9500	50000	27.0	
	325	LSCA325	10600	55000	25.0	
	350	LSCA350	13000	68000	26.0	
	355	LSCA355	13000	68000	27.0	
	400	LSCA400	16500	88000	30.0	
	450	LSCA450	23000	120000	32.0	
	500	LSCA500	27500	145000	38.0	
	550	LSCA550	32500	170000	42.0	
	600	LSCA600	38000	200000	46.0	
	630	LSCA630	41000	214000	50.0	
	710	LSC710	55000	290000	62.0	
	800	LSC800	64000	335000	78.0	
	900	LSC900	73000	385000	95.0	

ASSURED QUALITY

BRITISH STANDARD
MADE IN THE UK

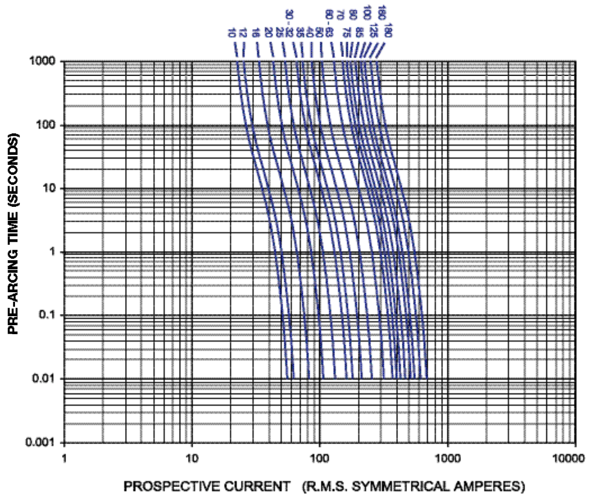
QUALITY ASSESSED ASA ISO 9002
CERT NO. 11050

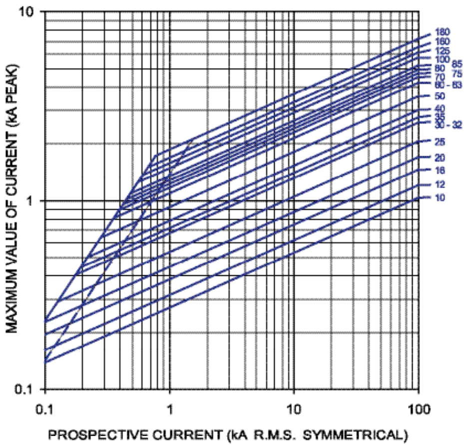
UKAS QUALITY MANAGEMENT
010

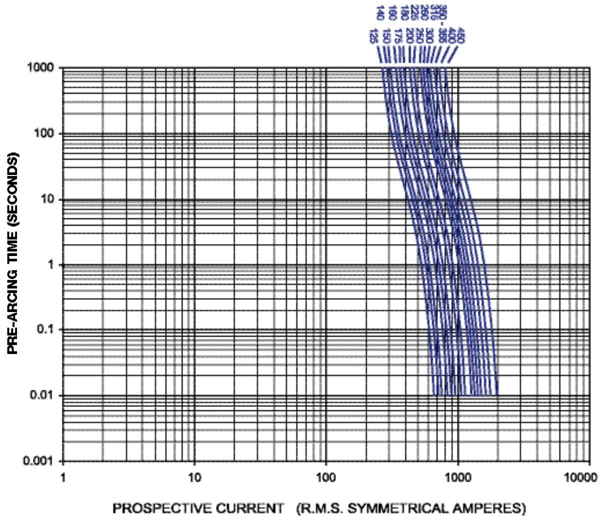
OPERATING CHARACTERISTICS TYPE LSCA

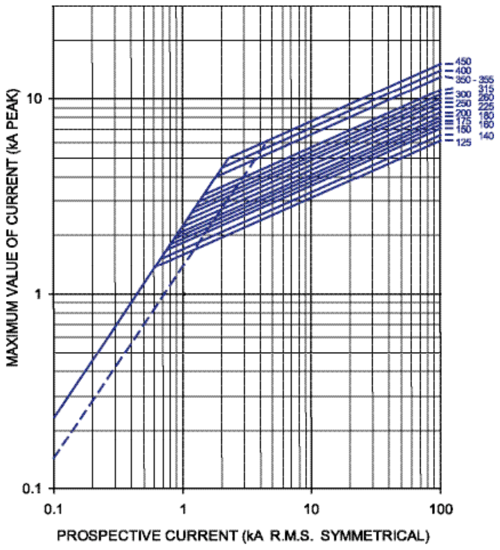
Time/Current

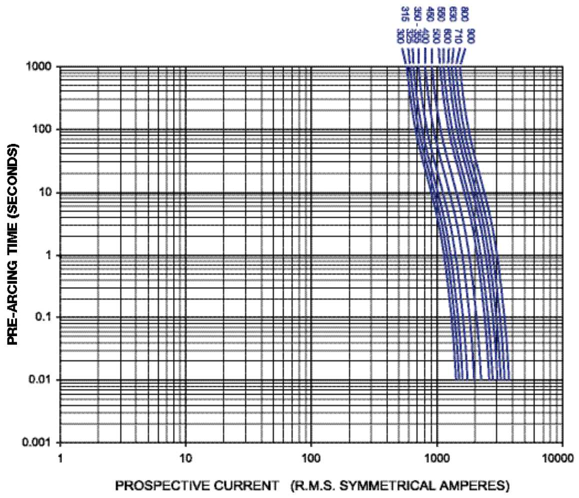
Cut-Off Current

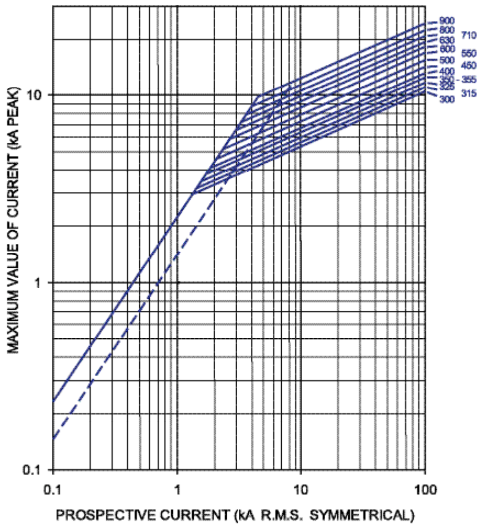








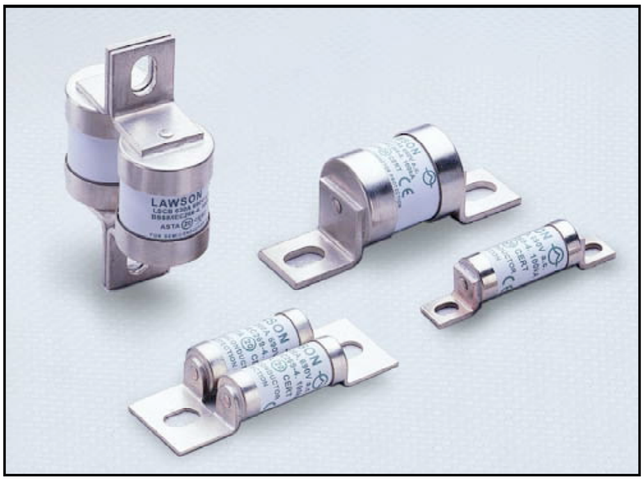




SEMICONDUCTOR PROTECTION FUSE-LINKS WITH BOLTED CONNECTIONS TYPE LSCB

Semiconductor protection fuse-links to BS88: Part 4 • IEC60269-4

Rated voltage: 690V a.c., 350V d.c., Rated breaking capacities: 100kA at 690V a.c., 100kA at 350V d.c.



The 690 volt series complies with the performance and dimensional requirements of BS88: Part 4 and IEC60269-4. These fuse-links are manufactured in the UK under the quality assurance systems employed by Lawson Fuses.

Indicators

Trip indicators are available for use in parallel with the main fuse-link and can either be attached to the associated fuse-link or mounted separately in panel mounted fuse-clips. A push-on adaptor and micro switch attachment is available for use with the trip indicator to give the facility of remote indication.

OUTLINE DIMENSIONS TYPE LSCB

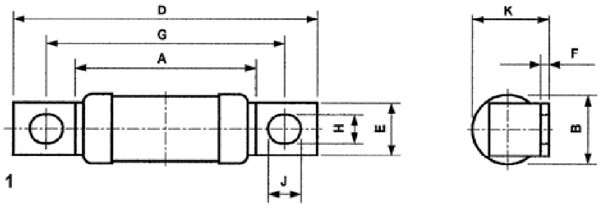


Figure 1

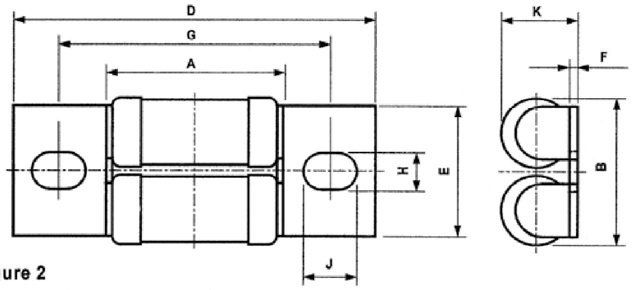


Figure 2

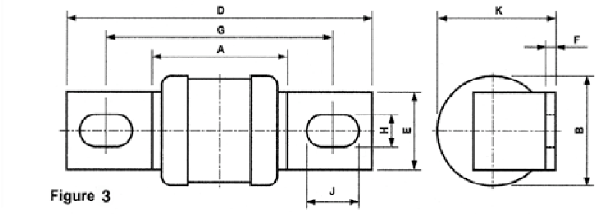


Figure 3

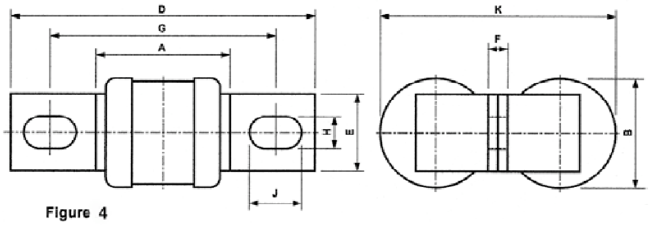


Figure 4

Current Ratings (Amps)	Figure No.	Dimensions in millimetres								
		A max.	B max.	D max.	E nom.	F max.	G nom.	H nom.	J min.	K max.
10-100	1	50.6	17.7	79.8	12.7	2.5	63.5	6.4	7.9	19.3
65-200	2	50.6	37.0	95.0	32.0	1.6*	70.0	8.7	10.3	19.9

Current Ratings (Amps)	Figure No.	Dimensions in millimetres								
		A max.	B max.	D max.	E nom.	F max.	G nom.	H nom.	J min.	K max.
160-355	1	60.0	38.2	114.0	25.4	3.3	85.0	10.3	13.0	41.5
175-710	2	60.0	38.2	114.0	25.4	6.4*	85.0	10.3	13.0	83.0

* Nominal.

For operating characteristics see page 9

ASSURED QUALITY

BRITISH STANDARD
MADE IN THE UK

QUALITY ASSESSED
ASA
ISO 9002
CERT NO. 11050

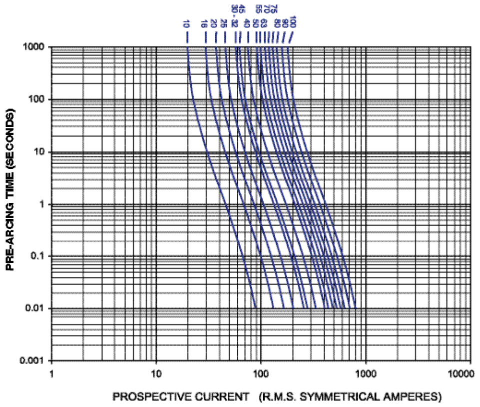
UKAS
QUALITY MANAGEMENT
010

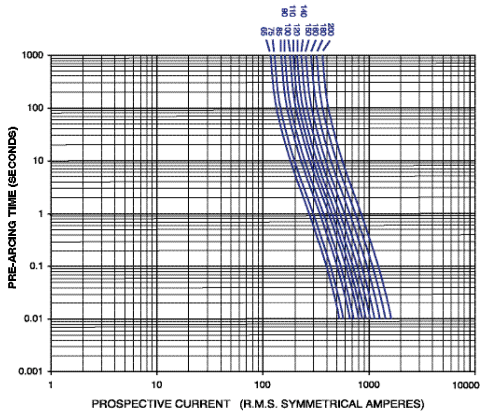
Product detail - 690V Fuse-Links

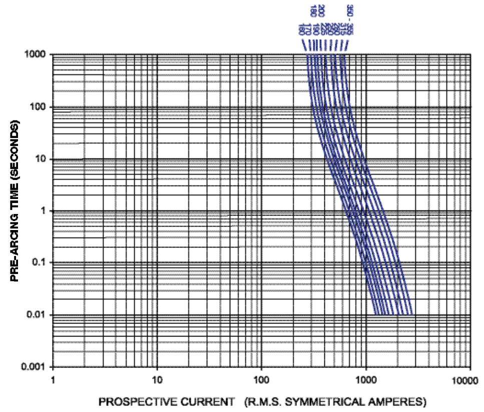
Voltage Rating a.c. Volt	**Current Rating Amps**	**List Reference**	**Pre Arcing I^2t A^2sec**	**Total I^2t at 690V A^2sec**	**Power Dissipation at I_N Watts**	**Dimensional Reference**
690	10	LSCB10	5	35	2.5	Page 6, Figure 1
	16	LSCB16	11	80	3.8	
	20	LSCB20	18	130	4.5	
	25	LSCB25	28	200	5.8	
	30	LSCB30	50	370	6.4	
	32	LSCB32	50	370	6.8	
	35	LSCB35	65	460	7.2	
	40	LSCB40	95	700	8.0	
	45	LSCB45	125	900	8.5	
	50	LSCB50	180	1300	9.5	
	55	LSCB55	200	1450	10.4	
	63	LSCB63	290	2100	11.5	
	70	LSCB70	390	2800	12.8	
	71	LSCB71	390	2800	13.0	
	75	LSCB75	430	3000	14.0	
	80	LSCB80	500	3500	14.5	
	90	LSCB90	730	5200	15.5	
	100	LSCB100	970	6800	16.0	
	65	LSCBT65	230	1600	12.0	Page 6, Figure 2
	75	LSCBT75	320	2300	14.5	
	85	LSCBT85	430	3000	16.2	
	90	LSCBT90	500	3600	16.6	
	100	LSCBT100	730	5200	18.5	
	110	LSCBT110	830	5900	21.0	
	120	LSCBT120	1050	7400	22.0	
	125	LSCBT125	1150	8200	23.0	
	140	LSCBT140	1500	11000	24.5	
	150	LSCBT150	1850	13000	26.4	
	160	LSCBT160	2000	14500	28.0	
	180	LSCBT180	3200	23000	30.0	
	200	LSCBT200	4200	30000	31.0	
	160	LSCB160	2000	14500	27.5	Page 6, Figure 3
	170	LSCB170	2600	18500	28.4	
	180	LSCB180	3200	23000	29.0	
	190	LSCB190	3500	25000	30.0	
	200	LSCB200	4200	30000	31.0	
	225	LSCB225	5700	40000	35.0	
	250	LSCB250	7500	53000	37.0	
	280	LSCB280	10800	76000	39.0	
	315	LSCB315	13500	97000	47.0	
	350	LSCB350	19500	140000	57.0	
	355	LSCB355	19500	140000	59.0	
	175	LSCBD175	2000	14500	30.0	Page 6, Figure 4
	180	LSCBD180	2200	15500	31.0	
	200	LSCBD200	2900	21000	32.0	
	225	LSCBD225	4200	30000	39.0	
	235	LSCBD235	4700	33000	41.0	
	280	LSCBD280	8000	57000	44.0	
	300	LSCBD300	9500	67000	47.0	
	315	LSCBD315	10000	75000	48.0	
	325	LSCBD325	11500	83000	49.0	
	350	LSCBD350	15500	110000	55.0	
	355	LSCBD355	15500	110000	56.0	
	400	LSCBD400	20000	147000	60.0	
	450	LSCBD450	30000	210000	65.0	
	500	LSCBD500	39000	277000	68.0	
	550	LSCBD550	51000	360000	72.0	
	560	LSCBD560	55000	390000	74.0	
	630	LSCBD630	73000	520000	83.0	
	710	LSB710	85000	600000	94.0	

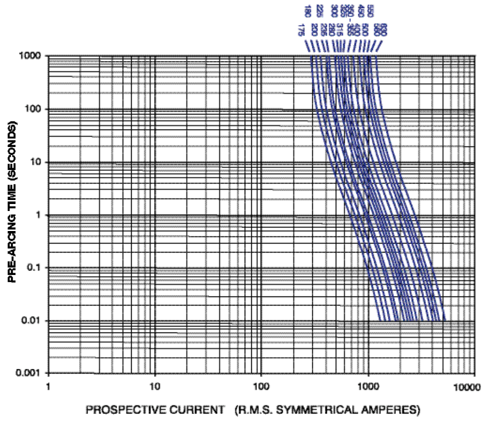
OPERATING CHARACTERISTICS TYPE LSCB

Time/Current

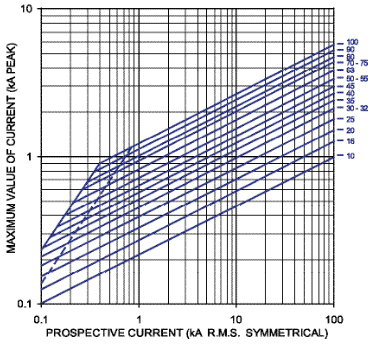


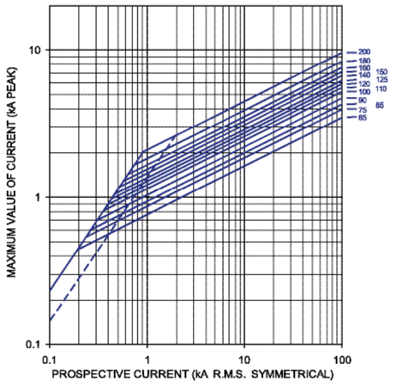


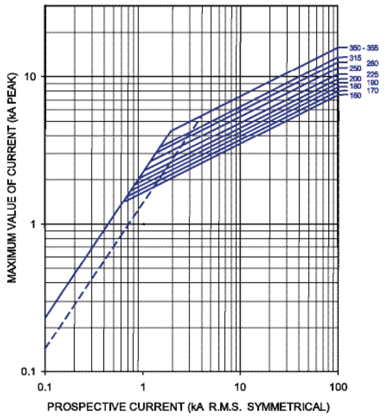


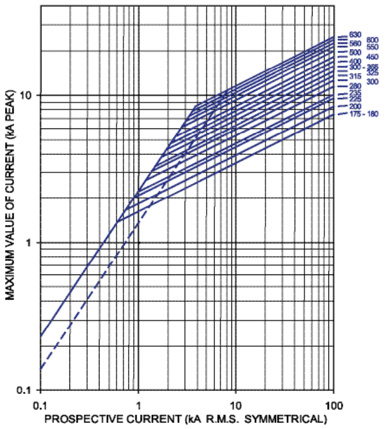


Cut-Off Current









COMPARATIVES

LAWSON	BUSSMANN	SIBA	GE POWER	MEM	FERRAZ	IR	DORMAN
LSCA10	LET10			10FNA	N076648	L350-10	DSL10
LSCA16	LET16			16FNA	Q077650	L350-16	DSL16
LSCA20	LET20			20FNA	L097507	L350-20	DSL20
LSCA25	LET25	5005306/25	GSA25	25FNA	R076651	L350-25	DSL25
LSCA32	LET32			32FNA		L350-32	DSL32
LSAC40	LET40		GSA40	40FNA	T076653	L350-40	DSL40
LSCA50	LET50	5005306/50	GSA50	50FNA	V076654	L350-50	DSL50
LSCA63	LET63			63FNA		L350-63	DSL63
LSCA80	LET80			80FNA	Z085559	L350-80	DSL80
LSCA100	LET100	5005306/100	GSA100	100FNA	Y08558	L350-100	DSL100
LSCA125			GSA125				
LSCA160	LMT160			160FPA			
LSCA200	LMT200	5005406/200	GSA200	200FPA	P082468	T350-200	DST200
LSCA250	LMT250		GSA250	250FPA	N082467	T350-250	DST250
LSCA315	LMT315		GSD315	315FPA	M082466	T350-315	DST315
LSCA350			GSA350				
LSCA400	LMMT400		GSA400	400FPA2	H082462	TT350-400	DSTT400
LSCA500	LMMT500		GSA500	500FPA2	G082461	TT350-500	DSTT500
LSCA630	LMMT630		GSA630	630FPA2	F082460	TT350-630	DSTT630
LSCB10	10ET	5007306/10		10FRB		E1000-10	DSG10
LSCB16	15ET	5007306/16	GSGB16	16FRB	G075883	E1000-15	DSG15
LSCB20	20ET	5007306/20		20FRB	H075884	E1000-20	DSG20
LSCB25	25ET	5007306/25	GSB25	25FRB	J075885	E1000-25	DSG25
LSCB32	32ET	5007306/32	GSGB30	32FRB	KO75886	E1000-32	DSG32
LSCB40	40ET	5007306/40	GSGB40	40FRB	M075888	E1000-40	DSG40
LSCB50	56ET	5007306/55	GSB55	56FRB	Q075891	E1000-56	DSG55
LSCB63	63ET	5007306/63	GSGB63	63FRB	R075892	E1000-63	DSG64
LSCB80	80ET	5007306/80	GSB80	80FRB	T075894	E1000-80	DSG80
LSCB100	100ET	5007306/100	GSB100	100FRB		E1000-100	DSG100
LSCBT125	125EET		GSGB125	125FTB2	B099959	EE1000-125	DSGG125
LSCBT140	140EET			140FTB2	J075908	EE1000-140	DSGG140
LSCBT150			GSGB150				
LSCBT160	160EET		GSGB160	160FTB2	K075909	EE1000-160	DSGG160
LSCBT180							
LSCBT200	200EET		GSGB200	200FTB2		EE1000-200	DSGG200
LSCB200	200MT	5007406/200	GSB200	200FUB	T097169	M1000-200	DSM200
LSCB225							
LSCB250	250MT	5007406/250	GSB250	250FUB	W097171	M1000-250	DSM250
LSCB315	315MT	5007406/315		315FUB	B097176	M1000-315	DSM315
LSCB355	355MT	5007406/355		355FUN	C097177	M1000-355	DSM355
LSCBD350		5007506/350	GSGB350				
LSCBD400	400MMT	5007506/400	GSB400	400FUB2	T097284	MM1000-400	DSMM400
LSCBD500	500MMT	5007506/450	GSB500	500FUB2	Z097289	MM1000-500	DSMM500
LSCBD630	630MMT	5007506/630		630FUB2	B097291	MM1000-630	DSMM630

Complementary ranges of semiconductor protection fuse-links to European and American standards are available. Details on request.

This comparative table is provided only as a guide to semiconductor fuse-link products in the marketplace. Lawson Fuses do not claim an identical match with the corresponding product codes as these specifications may change without notice. For detailed comparisons please contact our help desk.