

PSC PROTECTION SEMICONDUCTOR SQUARE BODY FUSES

SOLUTIONS GUIDE

Now manufactured in North America for faster delivery to our North American consumers



FERRAZ SHAWMUT IS NOW MERSEN

MERSEN

PSC Square Body Fuses: Built with speed in mind

Mersen's high-performance Protection Semiconductor (PSC) technology square body fuses are truly *built with speed in mind* from protection to delivery. Mersen PSC semiconductor fuses deliver the ultimate in protection for your power conversion equipment.

Mersen's speed is not only in the performance, but also in the speed it takes to deliver the semiconductor protection you need. We've increased our production capacity by adding new production lines in our Newburyport, USA and Juarez, Mexico facilities. Our PSC fuses are made to order within ten business days* and direct ship from our production plant to your facility.

What does this mean for you? Over 550 PSC square body fuses in eight different body sizes (Sizes 30, 31, 32, 33, 70, 71, 72, & 73) will be available to ship within two weeks.* With Mersen, you're guaranteed:

- Fast delivery
- Easy ordering
- Superior protection

MERSEN

PSC semiconductor square
body fuses now with

Priority Shipping Commitment

Over 550 PSC fuses in eight different body sizes
will be available to ship within two weeks.*

Sizes 30, 31, 32, 33, 70, 71, 72, and 73



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690/700 Volt PSC Square Body

Mersen 690/700V PSC square body fuses provide maximum flexibility in equipment design and ultimate protection for today's power conversion equipment. These square body fuses are available in four different body sizes, each size having more than seven worldwide acceptable mounting styles. The different mounting styles and body sizes along with a broad range of ampere ratings allow greatest flexibility in equipment design.

Mersen PSC fuses have been engineered to provide state-of-the-art protection for SCRs, diodes, thyristors, GTOs and IGBT devices. They have die-cut elements embedded in solidified sand, which helps control arcing characteristics for low I^2t and high interrupting rating. All contact surfaces are silver plated and all hardware is non-magnetic.

All PSC square body fuses are equipped with a low voltage trip-indicator. This trip-indicator can operate a field mountable microswitch which is easily mounted directly onto the fuse.

Features/Benefits:

- Choice of mounting styles gives wide choice for equipment design
- Broad range of ampere ratings in a given body size for design flexibility
- UL/CSA/IEC 60269-4 compliance for worldwide semiconductor applications

Highlights:

- Extremely fast-acting
- Current-limiting
- Very low I^2t
- Worldwide acceptability
- Superior cycling ability

Applications:

- Protection of rectifiers, inverters, DC drives, UPS Systems, reduced voltage motor starters, and other equipment in globally accepted applications



Ratings:

- Volts** : 450-700 VAC
 : DC - consult factory
- Amps** : 40-2500A
- I.R.** : 200kA AC

Approvals:

- UL recognized component
File E76491
- IEC 60269-4 certified
- CSA 012636 0 000
- CCC approved

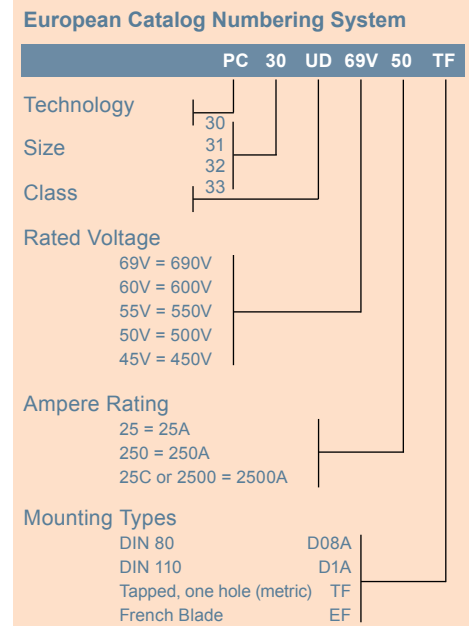
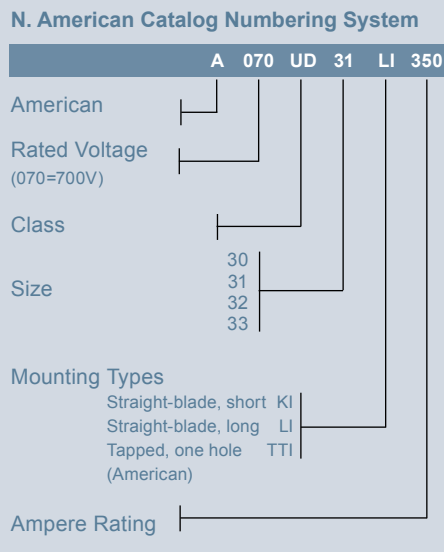


Catalog Number Designation:

A070 UD: North American Mounting Style/Approval Tested @ V_N

PC: European/IEC Mounting Style/Approval Tested @ $1.1 V_N$

* V_N = rated voltage

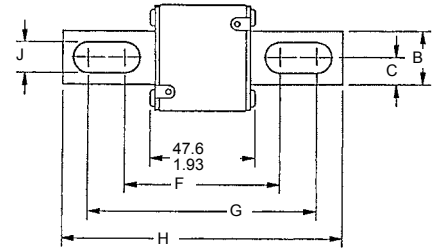


690/700 Volt PSC Square Body

North American Short Straight Blade, Type KI

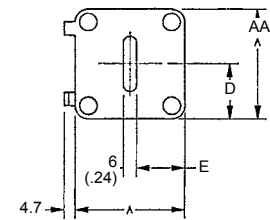
Body Size	Type	Dimensions - mm / in								
		A	B	C	D	E	F	G	H	J
30	KI	40 (1.57)	25 (.98)	12.5 (.49)	21 (.83)	18 (.71)	68 (2.68)	107 (4.21)	129 (5.08)	10.5 (.41)
31		51 (2.00)	25 (.98)	12.5 (.49)	25.5 (1.00)	22.5 (.88)	67.6 (2.66)	107.1 (4.216)	128.8 (5.07)	14.3 (.56)
32		60 (2.36)	32 (1.26)	16 (.63)	30 (1.18)	27 (1.06)	74.2 (2.92)	109 (4.29)	134 (5.28)	14.6 (.57)
33		74.5 (2.93)	40 (1.57)	20 (.79)	37.2 (1.46)	34.2 (1.35)	75.4 (2.97)	107.6 (4.24)	134 (5.28)	15.9 (.63)

Outline Dimensions: Types KI and LI



North American Long Straight Blade, Type LI

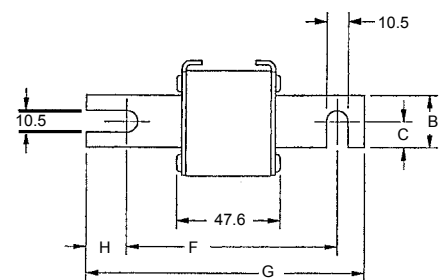
Body Size	Type	Dimensions - mm / in								
		A	B	C	D	E	F	G	H	J
30	LI	40 (1.57)	25 (.98)	12.5 (.49)	21 (.83)	18 (.71)	87.6 (3.45)	126.6 (4.98)	148.6 (5.85)	10.5 (.41)
31		51 (2.01)	25 (.98)	12.5 (.49)	25.5 (1.00)	22.5 (.89)	91.6 (3.61)	122.4 (4.82)	148.6 (5.85)	14.6 (.57)
32		60 (2.36)	32 (1.26)	16 (.63)	30 (1.18)	27 (1.06)	94.2 (3.71)	129 (5.08)	153 (6.02)	14.6 (.57)
33		74.5 (2.93)	40 (1.57)	20 (.79)	37.2 (1.46)	34.2 (1.35)	94.4 (3.72)	126.6 (4.98)	153 (6.02)	15.9 (.63)



European Blade DIN 80, Type D08A

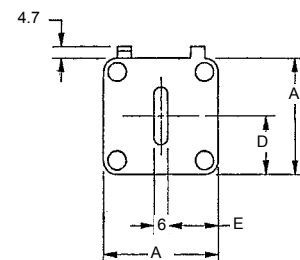
Body Size	Type	Dimensions - mm						
		A	B	C	D	E	F	G
30	DIN 80	40	25	12.5	21	17	77	110
31		51	25	12.5	25	22.5	77	110
32		60	32	16	30	27	77	110
33		74.5	40	20	37.2	34.25	77	110

Outline Dimensions: Types D08A and D1A



European Blade DIN 110, Type D1A

Body Size	Type	Dimensions - mm						
		A	B	C	D	E	F	G
30	DIN 110	40	25	12.5	21	17	101.6	134.6
31		51	25	12.5	25.5	22.5	101.6	134.6
32		60	32	16	30	27	101.6	134.6
33		74.5	40	20	37.2	34.25	101.6	134.6



690/700 Volt PSC Square Body

700 Volt North American Style Ratings and Application Data, LI Mounting

Body Size	Ampere Rating I_n (A)	Rated Voltage V_n (V)	Melting I^2t ($A^2s \times 10^3$)	Total Clearing I^2t @ V_n ($A^2s \times 10^3$)	Watts Loss @ I_n (W)	Reference No.	Catalog No.	Description
30	63	700	0.2	1.2	14	M300138	A070UD30LI63	A070URD30LI0063
	80	700	0.33	1.9	19	N300139	A070UD30LI080	A070URD30LI0080
	100	700	0.47	2.7	26	P300140	A070UD30LI100	A070URD30LI0100
	125	700	0.85	4.9	30	Q300141	A070UD30LI125	A070URD30LI0125
	160	700	1.6	9.2	37	R300142	A070UD30LI160	A070URD30LI0160
	200	700	3	16.7	43	S300143	A070UD30LI200	A070URD30LI0200
	250	700	5.8	32.4	50	T300144	A070UD30LI250	A070URD30LI0250
	315	700	12	67	55	V300145	A070UD30LI315	A070URD30LI0315
	350	700	15.5	86	60	W300146	A070UD30LI350	A070URD30LI0350
	400	700	23	130	65	X300147	A070UD30LI400	A070URD30LI0400
	450	700	26	165	88	K300527	A070UD30LI450	A070URD30LI0450
	500	700	41	264	88	L300528	A070UD30LI500	A070URD30LI0500
550	700	52	330	90	M300529	A070UD30LI550	A070URD30LI0550	
31	200	700	2.6	14.6	45	V300697	A070UD31LI200	A070URD31LI0200
	250	700	4.7	27	52	W300698	A070UD31LI250	A070URD31LI0250
	315	700	7.5	43	65	X300699	A070UD31LI315	A070URD31LI0315
	350	700	10.5	59	67	Y300700	A070UD31LI350	A070URD31LI0350
	400	700	19	110	68	Z300701	A070UD31LI400	A070URD31LI0400
	450	700	26.5	150	70	A300702	A070UD31LI450	A070URD31LI0450
	500	700	37	210	72	B300703	A070UD31LI500	A070URD31LI0500
	550	700	52	300	75	C300704	A070UD31LI550	A070URD31LI0550
	630	700	75	421	85	D300705	A070UD31LI630	A070URD31LI0630
	700	700	95	530	95	E300706	A070UD31LI700	A070URD31LI0700
800	700	140	880	120	F300707	A070UD31LI800	A070URD31LI0800	
32	400	700	15	86	75	J300204	A070UD32LI400	A070URD32LI0400
	450	700	22	124	80	K300205	A070UD32LI450	A070URD32LI0450
	500	700	28	157	90	L300206	A070UD32LI500	A070URD32LI0500
	550	700	37	211	95	M300207	A070UD32LI550	A070URD32LI0550
	630	700	54	302	105	N300208	A070UD32LI630	A070URD32LI0630
	700	700	76	432	110	P300209	A070UD32LI700	A070URD32LI0700
	800	700	115	648	120	Q300210	A070UD32LI800	A070URD32LI0800
	900	700	170	972	125	R300211	A070UD32LI900	A070URD32LI0900
	1000	700	240	1350	135	S300212	A070UD32LI1000	A070URD32LI1000
	1100	650	270	1620	165	B301071	A065UD32LI1100	A065URD32LI1100
	1250	600	410	2100	180	C301072	A060UD32LI1250	A060URD32LI1250
	1400	550	555	2600	190	D301073	A055UD32LI1400	A055URD32LI1400
1600	550	870	4000	195	E301074	A055UD32LI1600	A055URD32LI1600	
1800	500	1050	4400	330	F301075	A050UD32LI1800	A050URD32LI1800	
33	500	700	19	108	105	K300228	A070UD33LI500	A070URD33LI0500
	550	700	27	151	110	L300229	A070UD33LI550	A070URD33LI0550
	630	700	40	227	120	M300230	A070UD33LI630	A070URD33LI0630
	700	700	55	324	125	N300231	A070UD33LI700	A070URD33LI0700
	800	700	95	529	130	P300232	A070UD33LI800	A070URD33LI0800
	900	700	135	760	135	Q300233	A070UD33LI900	A070URD33LI0900
	1000	700	170	970	155	R300234	A070UD33LI1000	A070URD33LI1000
	1100	700	240	1360	160	S300235	A070UD33LI1100	A070URD33LI1100
	1250	700	350	2000	180	T300236	A070UD33LI1250	A070URD33LI1250
	1400	700	480	2700	200	V300237	A070UD33LI1400	A070URD33LI1400
	1600	650	555	3250	240	G301076	A065UD33LI1600	A065URD33LI1600
	1800	650	720	4330	260	H301077	A065UD33LI1800	A065URD33LI1800
	2000	600	950	5000	290	J301078	A060UD33LI2000	A060URD33LI2000
	2250	550	1250	5900	330	K301079	A055UD33LI2250	A055URD33LI2250
	2500	500	1870	7600	330	L301080	A050UD33LI2500	A050URD33LI2500