

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

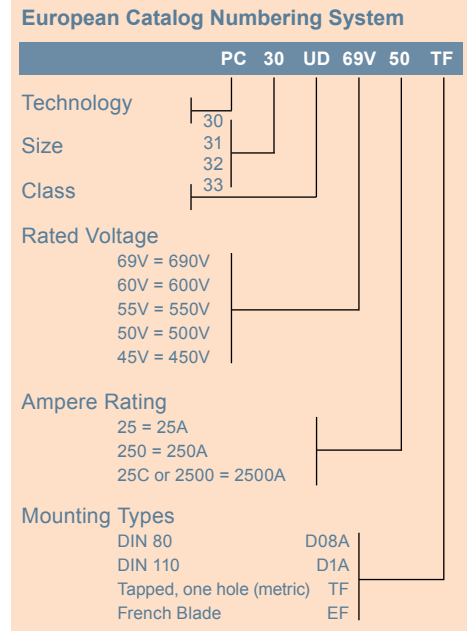
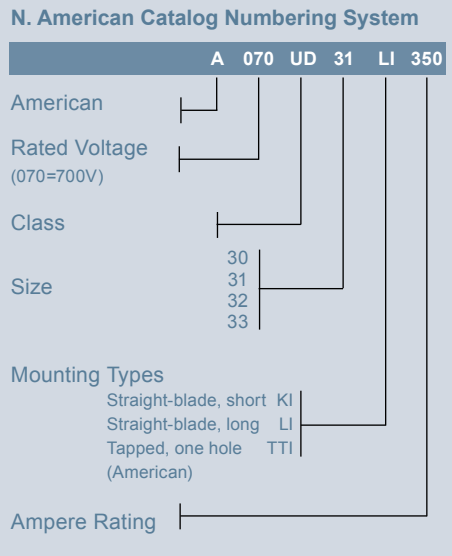


Catalog Number Designation:

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

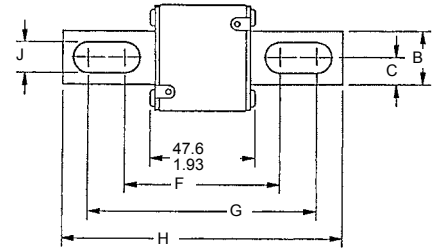


690/700 Volt PSC Square Body

North American Short Straight Blade, Type KI

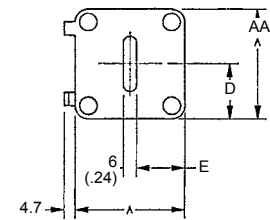
Body Size	Type	Dimensions - mm / in									
		A	B	C	D	E	F	G	H	J	
30	KI	40 (1.57)	25 (.98)	12.5 (.49)	21 (.83)	18 (.71)	68 (2.68)	107 (4.21)	129 (5.08)	10.5 (.41)	
31		51 (2.00)	25 (.98)	12.5 (.49)	25.5 (1.00)	22.5 (.88)	67.6 (2.66)	107.1 (4.216)	128.8 (5.07)	14.3 (.56)	
32		60 (2.36)	32 (1.26)	16 (.63)	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

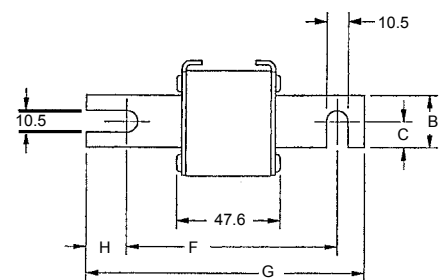
Body Size	Type	Dimensions - mm / in									
		A	B	C	D	E	F	G	H	J	
30	LI	40 (1.57)	25 (.98)	12.5 (.49)	21 (.83)	18 (.71)	87.6 (3.45)	126.6 (4.98)	148.6 (5.85)	10.5 (.41)	
31		51 (2.01)	25 (.98)	12.5 (.49)	25.5 (1.00)	22.5 (.89)	91.6 (3.61)	122.4 (4.82)	148.6 (5.85)	14.6 (.57)	
32		60 (2.36)	32 (1.26)	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

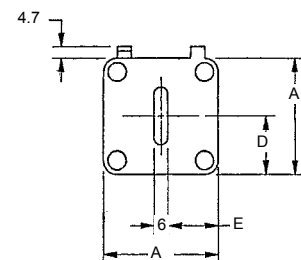
Body Size	Type	Dimensions - mm						
		A	B	C	D	E	F	G
30	DIN 80	40	25	12.5	21	17	77	110
31		51	25	12.5	25	22.5	77	110
32		60	32	16	30	27	77	110
33		74.5	40	20	37.2	34.25	77	110

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

690 Volt European/IEC Style Ratings and Application Data, DIN 110 Mounting

Body Size	Ampere Rating I_n (A)	Rated Voltage V_n (V) (IEC)	Melting I ² t (A ² s x 10 ³)	Total Clearing I ² t @ V_n (A ² s x 10 ³)	Watts Loss @ I_n (W)	Reference No.	Catalog No.	Description
30	50	690	0.116	0.68	9	G301191	PC30UD69V50D1A	6,9URD30D11A0050
	63	690	0.2	1.2	14	Q300118	PC30UD69V63D1A	6,9URD30D11A0063
	80	690	0.33	1.9	19	R300119	PC30UD69V80D1A	6,9URD30D11A0080
	100	690	0.47	2.7	26	S300120	PC30UD69V100D1A	6,9URD30D11A0100
	125	690	0.85	4.9	30	T300121	PC30UD69V125D1A	6,9URD30D11A0125
	160	690	1.6	9.2	37	V300122	PC30UD69V160D1A	6,9URD30D11A0160
	200	690	3	16.7	43	W300123	PC30UD69V200D1A	6,9URD30D11A0200
	250	690	5.8	32.4	50	X300124	PC30UD69V250D1A	6,9URD30D11A0250
	315	690	12	67	55	Y300125	PC30UD69V315D1A	6,9URD30D11A0315
	350	690	15.5	86	60	Z300126	PC30UD69V350D1A	6,9URD30D11A0350
	400	690	23	130	65	A300127	PC30UD69V400D1A	6,9URD30D11A0400
	450	690	26	165	88	S300695	PC30UD69V450D1A	6,9URD30D11A0450
	500	690	41	264	88	Y301091	PC30UD69V500D1A	6,9URD30D11A0500
	550	690	52	330	90	Z301092	PC30UD69V550D1A	6,9URD30D11A0550
31	200	690	2.6	14.6	45	H300019	PC31UD69V200D1A	6,9URD31D11A0200
	250	690	4.7	27	52	J300020	PC31UD69V250D1A	6,9URD31D11A0250
	315	690	7.5	43	65	K300021	PC31UD69V315D1A	6,9URD31D11A0315
	350	690	10.5	59	67	P300048	PC31UD69V350D1A	6,9URD31D11A0350
	400	690	19	110	68	L300022	PC31UD69V400D1A	6,9URD31D11A0400
	450	690	26.5	150	70	M300023	PC31UD69V450D1A	6,9URD31D11A0450
	500	690	37	210	72	N300024	PC31UD69V500D1A	6,9URD31D11A0500
	550	690	52	300	75	P300025	PC31UD69V550D1A	6,9URD31D11A0550
	630	690	75	421	85	Q300026	PC31UD69V630D1A	6,9URD31D11A0630
	700	690	95	530	95	R300027	PC31UD69V700D1A	6,9URD31D11A0700
800	690	140	880	120	H300709	PC31UD69V800D1A	6,9URD31D11A0800	
32	400	690	15	86	75	P300186	PC32UD69V400D1A	6,9URD32D11A0400
	450	690	22	124	80	Q300187	PC32UD69V450D1A	6,9URD32D11A0450
	500	690	28	157	90	R300188	PC32UD69V500D1A	6,9URD32D11A0500
	550	690	37	211	95	S300189	PC32UD69V550D1A	6,9URD32D11A0550
	630	690	54	302	105	T300190	PC32UD69V630D1A	6,9URD32D11A0630
	700	690	76	432	110	V300191	PC32UD69V700D1A	6,9URD32D11A0700
	800	690	115	648	120	W300192	PC32UD69V800D1A	6,9URD32D11A0800
	900	690	170	972	125	X300193	PC32UD69V900D1A	6,9URD32D11A0900
	1000	690	240	1350	135	Y300194	PC32UD69V10CD1A	6,9URD32D11A1000
33	500	690	19	108	105	S300258	PC33UD69V500D1A	6,9URD33D11A0500
	550	690	27	151	110	T300259	PC33UD69V550D1A	6,9URD33D11A0550
	630	690	40	227	120	V300260	PC33UD69V630D1A	6,9URD33D11A0630
	700	690	55	324	125	W300261	PC33UD69V700D1A	6,9URD33D11A0700
	800	690	95	529	130	X300262	PC33UD69V800D1A	6,9URD33D11A0800
	900	690	135	760	135	Y300263	PC33UD69V900D1A	6,9URD33D11A0900
	1000	690	170	970	155	Z300264	PC33UD69V10CD1A	6,9URD33D11A1000
	1100	690	240	1360	160	A300265	PC33UD69V11CD1A	6,9URD33D11A1100
	1250	690	350	2000	180	B300266	PC33UD66V12CD1A	6,9URD33D11A1250
	1400	690	480	2700	200	C300267	PC33UD69V14CD1A	6,9URD33D11A1400
	1500	600	500		220	H301974	PC33UD60V15CD1A	6URD33D11A1500
	1600	600	555	3250	240	Z301437	PC33UD60V16CD1A	6URD33D11A1600