

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

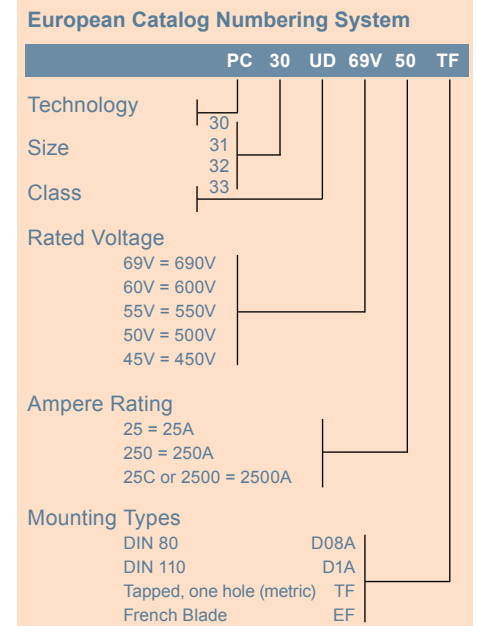
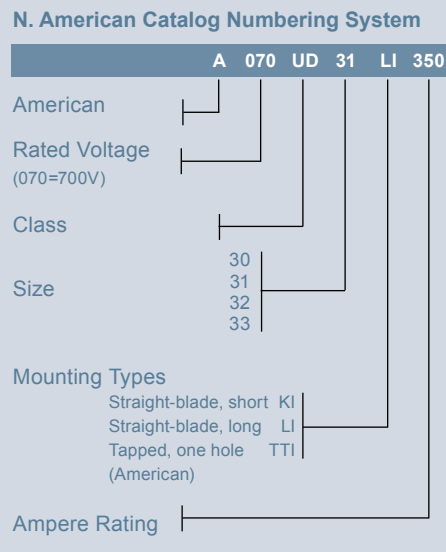


Catalog Number Designation:

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

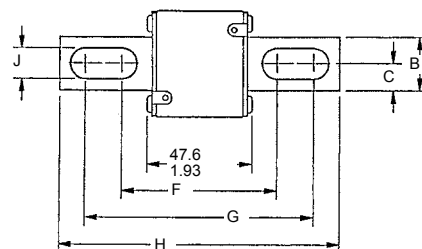


690/700 Volt PSC Square Body

North American Short Straight Blade, Type KI

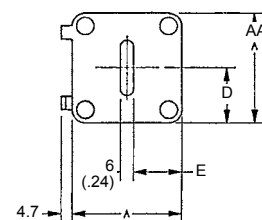
Body Size	Type	Dimensions - mm / in									
		A	B	C	D	E	F	G	H	J	
30	KI	40 (1.57)	25 (.98)	12.5 (.49)	21 (.83)	18 (.71)	68 (2.68)	107 (4.21)	129 (5.08)	10.5 (.41)	
31		51 (2.00)	25 (.98)	12.5 (.49)	25.5 (1.00)	22.5 (.88)	67.6 (2.66)	107.1 (4.216)	128.8 (5.07)	14.3 (.56)	
32		60 (2.36)	32 (1.26)	16 (.63)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

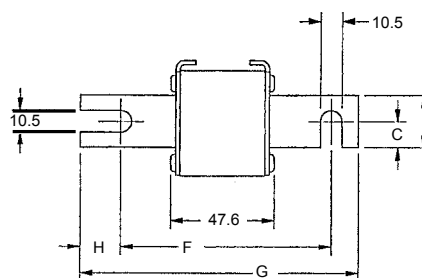
Body Size	Type	Dimensions - mm / in									
		A	B	C	D	E	F	G	H	J	
30	LI	40 (1.57)	25 (.98)	12.5 (.49)	21 (.83)	18 (.71)	87.6 (3.45)	126.6 (4.98)	148.6 (5.85)	10.5 (.41)	
31		51 (2.01)	25 (.98)	12.5 (.49)	25.5 (1.00)	22.5 (.89)	91.6 (3.61)	122.4 (4.82)	148.6 (5.85)	14.6 (.57)	
32		60 (2.36)	32 (1.26)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

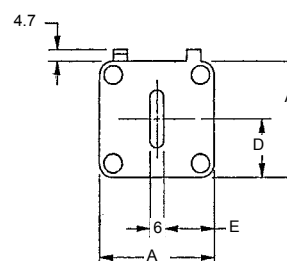
Body Size	Type	Dimensions - mm						
		A	B	C	D	E	F	G
30	DIN 80	40	25	12.5	21	17	77	110
31		51	25	12.5	25	22.5	77	110
32		60	32	16	30	27	77	110
33		74.5	40	20	37.2	34.25	77	110

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, TTI Mounting

Body Size	Ampere Rating I_n (A)	Rated Voltage V_n (V)	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	63	700	0.2	1.2	14	A301967	A070UD30TTI63	A070URD30TTI0063
	80	700	0.33	1.9	19	V301962	A070UD30TTI80	A070URD30TTI0080
	100	700	0.47	2.7	26	W300744	A070UD30TTI100	A070URD30TTI0100
	125	700	0.85	4.9	30	G300708	A070UD30TTI125	A070URD30TTI0125
	160	700	1.6	9.2	37	N300576	A070UD30TTI160	A070URD30TTI0160
	200	700	3	16.7	42	P300577	A070UD30TTI200	A070URD30TTI0200
	250	700	5.8	32.4	48	Q300578	A070UD30TTI250	A070URD30TTI0250
	315	700	12	67	53	R300579	A070UD30TTI315	A070URD30TTI0315
	350	700	15.5	86	57	S300580	A070UD30TTI350	A070URD30TTI0350
	400	700	23	130	60	T300581	A070UD30TTI400	A070URD30TTI0400
	450	700	26	165	80	V300582	A070UD30TTI450	A070URD30TTI0450
	500	700	41	264	80	W300583	A070UD30TTI500	A070URD30TTI0500
550	700	52	330	80	X300584	A070UD30TTI550	A070URD30TTI0550	
31	200	700	2.6	14.6	45	A300472	A070UD31TTI200	A070URD31TTI0200
	250	700	4.7	27	52	B300473	A070UD31TTI250	A070URD31TTI0250
	315	700	7.5	43	65	C300474	A070UD31TTI315	A070URD31TTI0315
	350	700	10.5	59	67	D300475	A070UD31TTI350	A070URD31TTI0350
	400	700	19	110	68	E300476	A070UD31TTI400	A070URD31TTI0400
	450	700	26.5	150	70	F300477	A070UD31TTI450	A070URD31TTI0450
	500	700	37	210	70	G300478	A070UD31TTI500	A070URD31TTI0500
	550	700	52	300	70	H300479	A070UD31TTI550	A070URD31TTI0550
	630	700	75	421	75	J300480	A070UD31TTI630	A070URD31TTI0630
	700	700	95	530	85	K300481	A070UD31TTI700	A070URD31TTI0700
800	700	140	880	105	L300482	A070UD31TTI800	A070URD31TTI0800	
32	400	700	15	86	72	Q300463	A070UD32TTI400	A070URD32TTI0400
	450	700	22	124	77	N300461	A070UD32TTI450	A070URD32TTI0450
	500	700	28	157	85	P300462	A070UD32TTI500	A070URD32TTI0500
	550	700	37	211	90	R300464	A070UD32TTI550	A070URD32TTI0550
	630	700	54	302	95	S300465	A070UD32TTI630	A070URD32TTI0630
	700	700	76	432	100	T300466	A070UD32TTI700	A070URD32TTI0700
	800	700	115	648	110	V300467	A070UD32TTI800	A070URD32TTI0800
	900	700	170	972	110	W300468	A070UD32TTI900	A070URD32TTI0900
	1000	700	240	1350	115	X300469	A070UD32TTI1000	A070URD32TTI1000
	1100	650	270	1620	140	M301081	A065UD32TTI1100	A065URD32TTI1100
	1250	600	410	2100	150	N301082	A060UD32TTI1250	A060URD32TTI1250
	1400	550	555	2600	160	P301083	A055UD32TTI1400	A055URD32TTI1400
1600	550	870	4000	165	Q301084	A055UD32TTI1600	A055URD32TTI1600	
1800	500	1050	4400	195	R301085	A050UD32TTI1800	A050URD32TTI1800	
33	500	700	19	108	105	X300446	A070UD33TTI500	A070URD33TTI0500
	550	700	27	151	105	Y300447	A070UD33TTI550	A070URD33TTI0550
	630	700	40	227	110	Z300448	A070UD33TTI630	A070URD33TTI0630
	700	700	55	324	115	A300449	A070UD33TTI700	A070URD33TTI0700
	800	700	95	529	120	T300443	A070UD33TTI800	A070URD33TTI0800
	900	700	135	760	120	B300450	A070UD33TTI900	A070URD33TTI0900
	1000	700	170	970	135	C300451	A070UD33TTI1000	A070URD33TTI1000
	1100	700	240	1360	135	D300452	A070UD33TTI1100	A070URD33TTI1100
	1250	700	350	2000	150	E300453	A070UD33TTI1250	A070URD33TTI1250
	1400	700	480	2700	160	F300454	A070UD33TTI1400	A070URD33TTI1400
	1600	650	555	3250	210	S301086	A065UD33TTI1600	A065URD33TTI1600
	1800	650	720	4330	225	T301087	A065UD33TTI1800	A065URD33TTI1800
	2000	600	950	5000	250	V301088	A060UD33TTI2000	A060URD33TTI2000
	2250	550	1250	5900	280	W301089	A055UD33TTI2250	A055URD33TTI2250
2500	500	1870	7600	280	Y300838	A050UD33TTI2500	A050URD33TTI2500	