

# FUSE HOLDER SELECTION GUIDE



Fuse Type	Fuse Series	Panel Mount	PC Board	Blocks	Clips	In-Line
<b>4.5x14.5 mm (2AG)</b>	<b>225</b>	3452 International Shock-Safe	254101	254 Omni-Blok	111501	150274
	<b>229</b>	345 International shock-Safe (old)	254121 Beryllium Copper		111505 Beryllium Copper	
		245001 Shorty Solder QC			111506	
		245002 Shorty NEMA QC				
<b>5x20 mm</b>	<b>213</b>	3455 International Shock-Safe	345121 horizontal	520003 Omni-Blok QC	111501	150274
	<b>215</b>	345 International shock-Safe (old)	521101 Omni-Blok	520004 Omni-Blok Soder	445001	
	<b>216</b>	286377 Flip Top	OPTF0060W no cover optional	520005 Omni-Blok anti-rotation	111505 Beryllium Copper	
	<b>217</b>	800	OPTF0075P cover optional		30210	
	<b>218</b>	820	OOPS0232P cover		111506 Beryllium Copper	
	<b>219A</b>	823 snap-in	646		520001	
	<b>232</b>	821	648 cover	FB58A	100054	
	<b>233</b>	850	640 cover and puller combo	FB58B	100056	
	<b>234</b>	851	649		111005 T&R	
	<b>235</b>	860 4 Watt	656 659,660 cover		519 T&R	
	<b>239</b>	870 medical,captive cap	658 Surface Mt 659,660 cover		520	
		FH503R	810 horizontal		521	
		FH503S	830 horizontal		518 Combo,3AA & 5X20	
			862 horizontal			
			811 vertical			
		831 vertical 4pin				
		834 vertical				
		852 vertical 2 pin				
		853 vertical 2pin				
		860 4 Watt				
<b>6.3x32 mm (3AB/3AG)</b>	<b>312</b>	34453 International Shock-Safe	345101 horizontal	354 Omni-Blok	102071	155100 Twist-Lock 150215 Assem,no Fuse 155000 Heavy Duty 150079 Assem,no Fuse 150322 120VAC UL
	<b>313</b>	345 International shock-Safe (old)	810 horizontal	356 Screw terminal	102074	
	<b>314</b>	342 Traditional	862 horizontal	359 Screw terminal	122083	
	<b>326</b>	344 Indicating Snap Mount	811 vertical	FB66A	122067 Beryllium Copper	
		348 Snap Mount			122088	
		346377 Flip Top			122093 Beryllium Copper	
		342006 Watertight screw-in			102078	
		340312/3 Shielded Watertight			102079	
		342024 MII high temp knurled			102076	
		342025 MII high temp fluted			102076	
		800 2.5 Watt			102080	
		80001 500V 2.5 Watt			122090 Beryllium Copper	
		860 4 Watt			121001 Beryllium Copper	
		FH602R			100058	
		FH604R			101001	
<b>TE5®/TR5®</b>	<b>370,372</b>	570	559			
	<b>373,378</b>	575 cap	560			
	<b>374,379</b>		562			
	<b>375,382</b>		564			
	<b>384</b>		565 90°			
			571			
			575 cap			
<b>Micro™/TR3®</b>	<b>272 273</b>	282001 Front mt.Neoprene	281005 Vertical silver			
	<b>262 268</b>	282007 Front mt.Conductive	281007 Horizontal silver			
	<b>269 24</b>	282002 Rear mt Neoprene	281008 Vertical tin			
	<b>279</b>	282008 Rear mt.Conductive	281010 Horizontal tin			
		280003 125V indicating				
	280004 32V indicating					

## 4.5mm x 14.5mm (2AG) SIZE FUSE SERIES AND HOLDER OPTIONS



Fuse Series Name	Time Lag (Slo-Blo®)	Medium Acting	Fast Acting	Very Fast Acting	Device Range <sup>3</sup> (Operating Current Options in Amps)	Max. Voltage Rating <sup>3</sup> (Volts)	Interrupting Rating at Max Voltage Rating <sup>3</sup> (Amps)	Operating Temperature Range	Agency Approvals <sup>3</sup>										RoHS Compliant	Lead Free			
									Americas				Europe				Asia						
									UL	UR	CSA	OPL	CE	VDE	TUV	BSI	Semko	PSE			K	CCC	COC
208				•	0.125 - 10	350	100	-55°C to +125°C		•										•	•		
209	•				0.25 - 1	350	100			•											•	•	
224/225			•		0.1 - 10	250 / 125	35 - 500			•	•	•										•	•
229/230	•				0.25 - 7	250 / 125	35 - 400			•	•	•										•	•

Panel Mount Holders	PC Board Mount Holders	Blocks	Clips	In-Line Holders
3452 International Shock-Safe	254101	254 Omni-Blok	111501	150274
345 International shock-Safe (old)	254121 Beryllium Copper		111505 Beryllium Copper	
245001 Shorty Solder QC			111506	
245002 Shorty NEMA QC				
286377 Flip Top				

## 5mm x 20mm SIZE FUSE SERIES AND HOLDER OPTIONS



Series Name <sup>1</sup>	Time Lag (Slo-Blo®)	Medium Acting	Fast Acting	Very Fast Acting	Device Range <sup>3</sup> (Operating Current Options in Amps)	Max. Voltage Rating <sup>3</sup> (Volts)	Interrupting Rating at Max Voltage Rating <sup>3</sup> (Amps)	Operating Temperature Range	Agency Approvals <sup>3</sup>										RoHS Compliant	Lead Free				
									Americas				Europe				Asia							
									UL	UR	CSA	OPL	CE	VDE	TUV	BSI	Semko	PSE			K	CCC	COC	
217				•	0.032 - 15	250	35 - 150	-55°C to +125°C		•	•			•	•	•	•	•	•	•	•	•	•	
218	•				0.032 - 16	250	35 - 100			•	•			•	•	•	•	•	•	•	•	•	•	•
213	•				0.2 - 6.3	250	35 - 63			•	•			•	•	•	•	•	•	•	•	•	•	•
219XA	•				0.4 - 6.3	250	150			•	•			•	•	•	•	•	•	•	•	•	•	•
216			•		0.05 - 16	250	750 - 1500			•	•			•	•	•	•	•	•	•	•	•	•	•
215	•				0.125 - 25	250	300 - 1500			•	•			•	•	•	•	•	•	•	•	•	•	•
232		•			1 - 10	250 / 125	300 / 10,000																	
235			•		0.1 - 7	250 / 125	35 - 10,000			•	•													
233			•		1 - 10	125	10,000			•	•													
234			•		1 - 10	250	100 - 200			•	•													
239	•				0.08 - 7	250 / 125	35 - 10,000			•	•													
477	•				0.5 - 16	400DC / 500AC	100 - 1500			•	•													

Panel Mount Holders	PC Board Mount Holders	Blocks	Clips	In-Line Holders
3455 International Shock-Safe	345121 horizontal	520003 Omni-Blok QC	111501	150274
345 International shock-Safe (old)	521101 Omni-Blok	520004 Omni-Blok Soder	445001	
286377 Flip Top	OPTF0060W no cover optional	520005 Omni-Blok anti-rotation	111505 Beryllium Copper	
800	OPTF0075P cover optional		30210	
820	OOPS0232P cover		111506 Beryllium Copper	
823 snap-in	646		520001	
821	648 cover	FB58A	100054	
850	640 cover and puller combo	FB58B	100056	
851	649		111005 T&R	
860 4 Watt	656 659,660 cover		519 T&R	
870 medical,captive cap	658 Surface Mt 659,660 cover		520	
FH503R	810 horizontal		521	
FH503S	830 horizontal		518 Combo,3AA & 5X20	
	862 horizontal			
	811 vertical			
	831 vertical 4pin			
	834 vertical			
	852 vertical 2 pin			
	853 vertical 2pin			
	860 4 Watt			

## 6.3mm x 32mm (3AB / 3AG) SIZE FUSE SERIES AND HOLDER OPTIONS



Series Name <sup>1</sup>	Time Lag (Slc-Blo®)	Medium Acting	Fast Acting	Very Fast Acting	Device Range <sup>3</sup> (Operating Current Options in Amps)	Max. Voltage Rating <sup>3</sup> (Volts)	Interrupting Rating at Max Voltage Rating <sup>3</sup> (Amps)	Operating Temperature Range	Agency Approvals <sup>3</sup>										RoHS Compliant	Lead Free			
									Americas				Europe				Asia						
									UL	UR	CSA	OPL	CE	VDE	TUV	BSI	Semko	PSE			K	CCC	COC
312/318			•		0.01 - 35	250 / 125 / 32	35 - 300	-55°C to +125°C	•	•	•		•					•	•			•	•
313/315	•				0.01 - 30	250 / 125 / 32	35 - 300		•	•	•		•					•	•			•	•
314/324			•		0.125 - 40	250	35 - 1000		•	•	•		•					•	•			•	•
322				•	1 - 30	250 / 65	100 - 1000		•	•	•		•					•	•			•	•
325/326	•				0.01 - 30	250 / 125	100 - 600		•	•	•		•					•	•			•	•
388			•		1 - 30	250	100						•					•	•			•	•
505			•		10 - 30	450 / 500	20,000 - 50,000			•			•									•	•

Panel Mount Holders	PC Board Mount Holders	Blocks	Clips	In-Line Holders
34453 International Shock-Safe	345101 horizontal	354 Omni-Blok	102071	155100 Twist-Lock
345 International shock-Safe (old)	810 horizontal	356 Screw terminal	102074	150215 Assem,no Fuse
342 Traditional	862 horizontal	359 Screw terminal	122083	155000 Heavy Duty
344 Indicating Snap Mount	811 vertical	FB66A	122067 Beryllium Copper	150079 Assem,no Fuse
348 Snap Mount			122088	150322 120VAC UL,
346377 Flip Top			122093 Beryllium Copper	
342006 Watertight screw-in			102078	
340312/3 Shielded Watertight			102079	
342024 MII high temp knurled			102076	
342025 MII high temp fluted			102076	
800 2.5 Watt			102080	
80001 500V 2.5 Watt			122090 Beryllium Copper	
860 4 Watt			121001 Beryllium Copper	
FH602R			100058	
FH604R			101001	
			101002	
			101003	
			102064	
			121004 Beryllium Copper	
			121002 Beryllium Copper	
			518 Combo,3AA & 5X20	

### FUSE HOLDER RE-RATING:

For 25°C ambient temperatures, it is recommended that fuse holders be operated at no more than 60% of the nominal current rating established using the controlled test conditions specified by Underwriters Laboratories.

The primary objective of these UL test conditions is to specify common test standards necessary for the continued control of manufactured items intended for protection against fire, etc. A copper dummy fuse is inserted in the fuse holder by Underwriters Laboratories, and then the current is increased until a certain temperature rise occurs.

The majority of the heat is produced by the contact resistance of the fuse holder clips. This value of current is considered to be the rated current of the fuse holder, expressed as 100% of rating.

Some of the more common, everyday applications may differ from these UL test conditions as follows: fully enclosed fuse holders, high contact resistance, air movement, transient spikes, and changes in connecting cable size (diameter and length).

Even small variations from the controlled test conditions can greatly affect the ratings of the fuse holder. For this reason, **it is recommended that fuse holders be de-rated by 40% (operated at no more than 60% of the nominal current rating established using the Underwriter Laboratories test conditions).**

