

CS-3 SERIES

E-RATED/MEDIUM VOLTAGE FUSES



HIGHLIGHTS:

- E-Rated
- UL Listed 5.5kV and 15.5kV
- Complies with ANSI C37.46



DEFINITIONS:

E-rating

E-rated fuses operate as follows:
 100E or less - must melt in 300 seconds (5 mins.) at 200 to 240% of E (ampere) rating.
 Over 100E - must melt in 600 seconds (10 mins.) at 220 to 264% of E (ampere) rating.
 Example - A 100E fuse must melt in 300 seconds with an applied current of 200 to 240 amperes.

General Purpose Current-Limiting Fuse

A general purpose current-limiting power fuse is one that is capable of interrupting all currents from its rated interrupting rating down to the current that causes melting of the fusible element in one hour.

APPLICATIONS:

- Protection for 5.5, 8.25
- or 15.5kV transformers or distribution system.

5kV, 8kV and 15.5kV FERRULE MOUNTED FUSES

Amp-trap® CS-3 E-rated 5kV 8kV and 15kV fuses have 2 or 3 inch diameter barrels with ferrules and are mounted in spring reinforced clips. They are UL listed as “general purpose current-limiting fuses” and are for use indoors (or outdoors in a weatherproof enclosure). The unique time-current characteristic of Ferraz Shawmut E-rated fuses allows them to be closely sized to transformer full-load rated current, as recommended by IEEE guidelines, without being affected by normal magnetizing inrush current. CS-3 fuses are typically sized at transformer rated current of 133%, thereby providing superior overall protection.

Features/Benefits

- **UL Listed** for compatibility with UL listed equipment
- **Ferrule mounting** for standard clips and interchangeability with other brands of fuses
- **Current Limiting** for superior equipment protection
- **Blown-fuse indicator** gives positive identification of open fuse
- **Non-venting** for silent operation
- **Metal Embossed Catalog Number** and manufacturing date for lasting identification

Ratings

- **A055F**
AC: 5E to 450E
5.5kV, 63kA I.R. Sym.
- **A825X**
AC: 10E to 200E
8.25kV, 50kA I.R. Sym.
- **A155F**
AC: 5E TO 200E
15.5kV, 50kA I.R. Sym.

Approvals

- UL Listed to JEEG, “Fuses Over 600 Volts”
UL File # E143362

Spring-Reinforced Clips for CS-3 Fuses:

228-700-530 (One pair of clips)
 For 3" Diameter, 2 barrels max.

CS-3

E-RATED/MEDIUM VOLTAGE FUSES/A055F

15.5kV Ferrule Mounted

Catalog Numbering System

<u>A</u>	<u>1</u>	<u>5</u>	<u>5</u>	<u>F</u>	<u>1</u>	<u>D</u>	<u>0</u>	<u>R</u>	<u>0</u>	-	<u>1</u>	<u>0</u>	<u>0</u>	<u>E</u>
										Ampere Rating				
										Revision/No.				
										Special Features				
										Diameter (C=2", D=3")				
										No. of Barrels				
										Style (F=Ferrule Mount)				
										Max. Voltage Rating (155=15.5kV)				
Amp-trap Fuse														

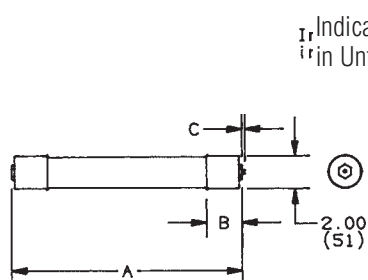


Figure A

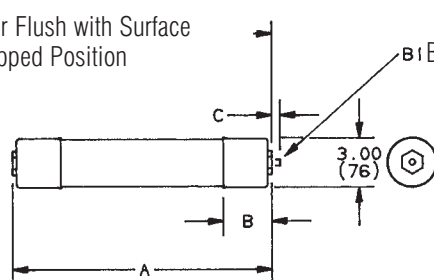


Figure B

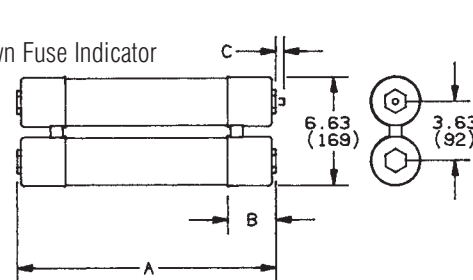


Figure C

Catalog Numbering System, Ratings, Dimensions, CS-3 Series, 15.5kV

(mm) INTERRUPTING NEW CATALOG NUMBER	OLD CATALOG NUMBER	AMPERE RATING	NUMBER OF BARRELS	FIG.				DIMENSIONS Inches RATING RMS SYM.* AMPERES
					A	B	C	
15.5kV Max.. – Ferrule Mounted Style – 15” (381 mm) Clip Centers – 2” (50.8mm) Barrel Diameter								
A155F1CORO - 5E 7E 10E 15E 20E 25E 30E	A1550X - 5E-1B 7E-1B 10E-1B 15E-1B 20E-1B 25E-1B 30E-1B	5E 7E 10E 15E 20E 25E 30E	1	A	17.03 (433)	2.2 (56)	.19 (4.8) Tripped Force 1 lb.	50,000
15.5kV Max.. – Ferrule Mounted Style – 15” (381mm) Clip Centers – 3” (76.2mm) Barrel Diameter								
A155F1DORO - 10E 15E 20E 25E 30E 40E 50E	A1550X - 10E-1F 15E-1 20E-1 25E-1 30E-1 40E-1 50E-1	10E 15E 20E 25E 30E 40E 50E	1	B	18.87 (479)	3.0 (76)	0.5 (13) Tripped Force 2 lbs.	50,000
A155F2DORO - 65E 80E 100E	65E-1 80E-1 100E-1	65E 80E 100E	2	C				
15.5kV Max.. – Ferrule Mounted Style – 18” (457mm) Clip Centers – 3” (76.2mm) Barrel Diameter								
A155F1DORO - 65E 80E 100E	A1550X - 65E-1D 80E-1D 100E-1D	65E 80E 100E	1	B	21.75 (552)	3.0 (76)	0.5 (13) Tripped Force 2 lbs.	50,000
A155F2DORO- 125E 150E 175E 200E	125E-1D 150E-1D 175E-1D 200E-1D	125E 150E 175E 200E	2	C				

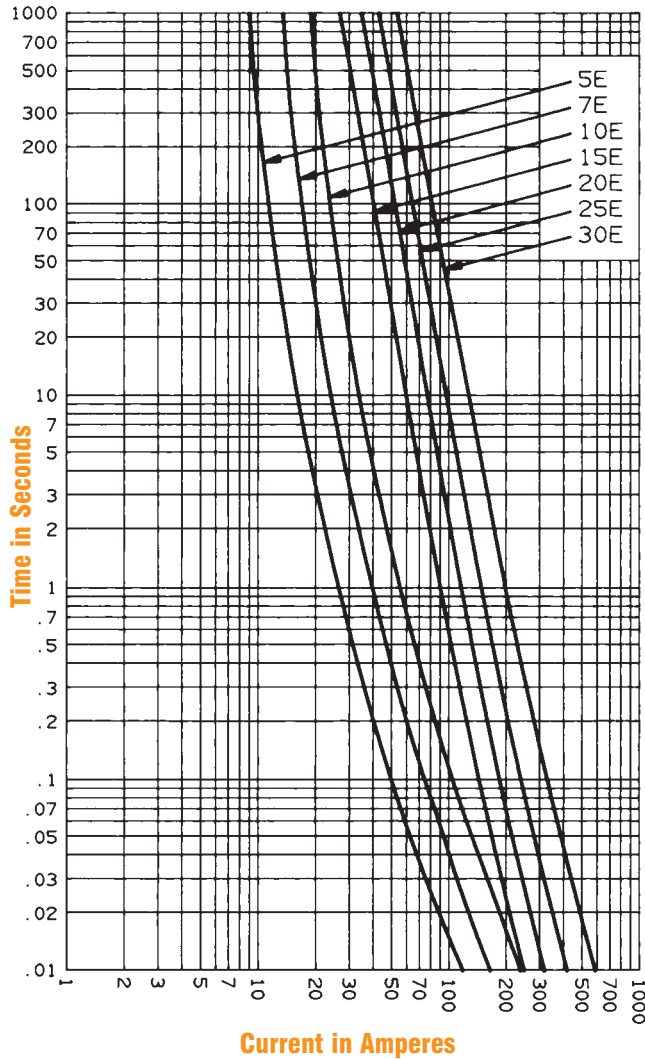
* RMS ASYM. AMPERES = RMS SYM. AMPERES x 1.6

CS-3

E-RATED/MEDIUM VOLTAGE FUSES/A055F

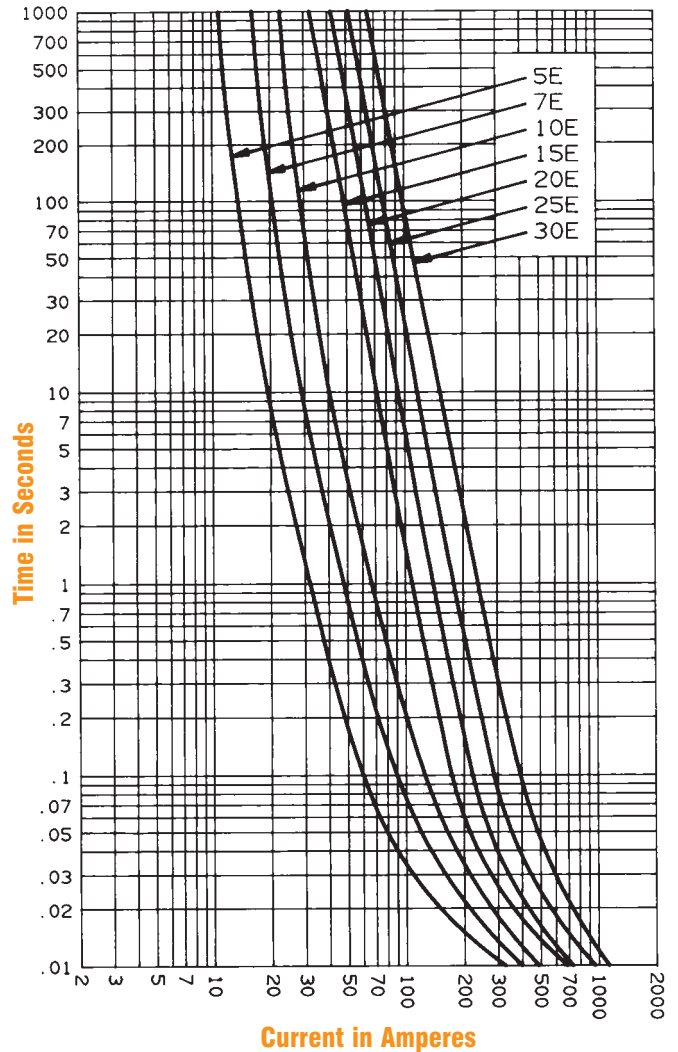
A155F1COR0 – 5E to 30E

Minimum Melting Time – Current Data, 15.5kV Fuses



A155F1COR0 – 5E to 30E

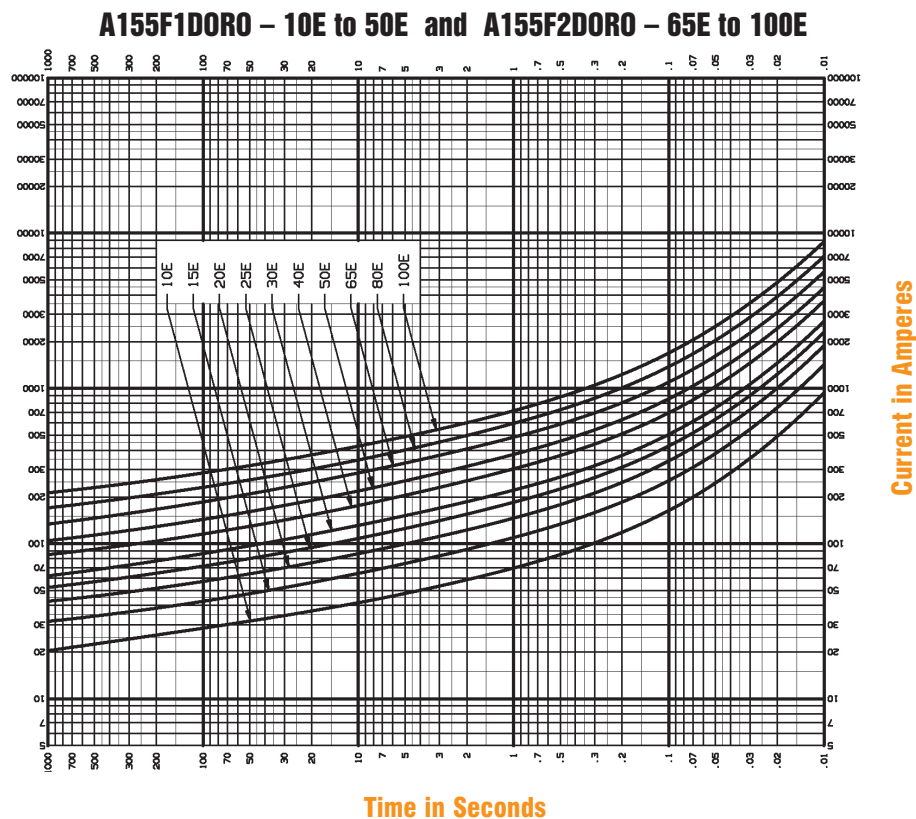
Total Clearing Time – Current Data, 15.5kV Fuses



CS-3

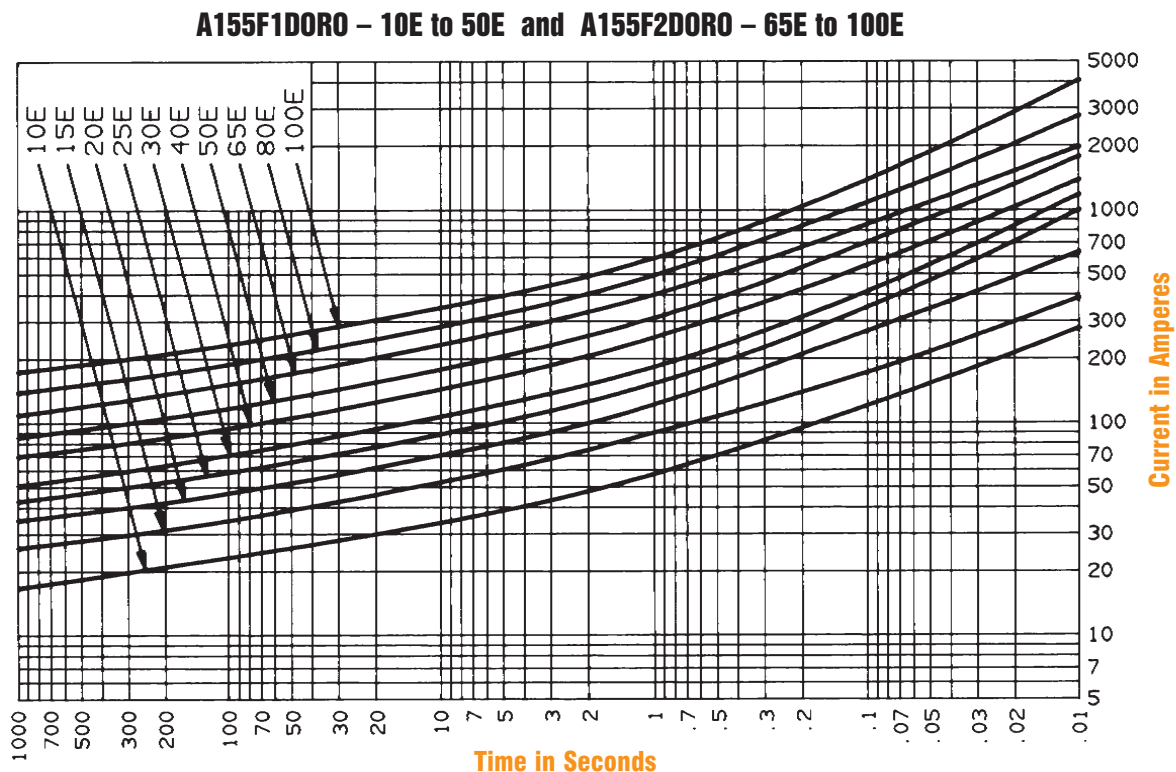
E-RATED/MEDIUM VOLTAGE FUSES/A055F

Total Clearing Time – Current Data, 15.5kV Fuses



E

Minimum Melting Time – Current Data, 15.5kV Fuses



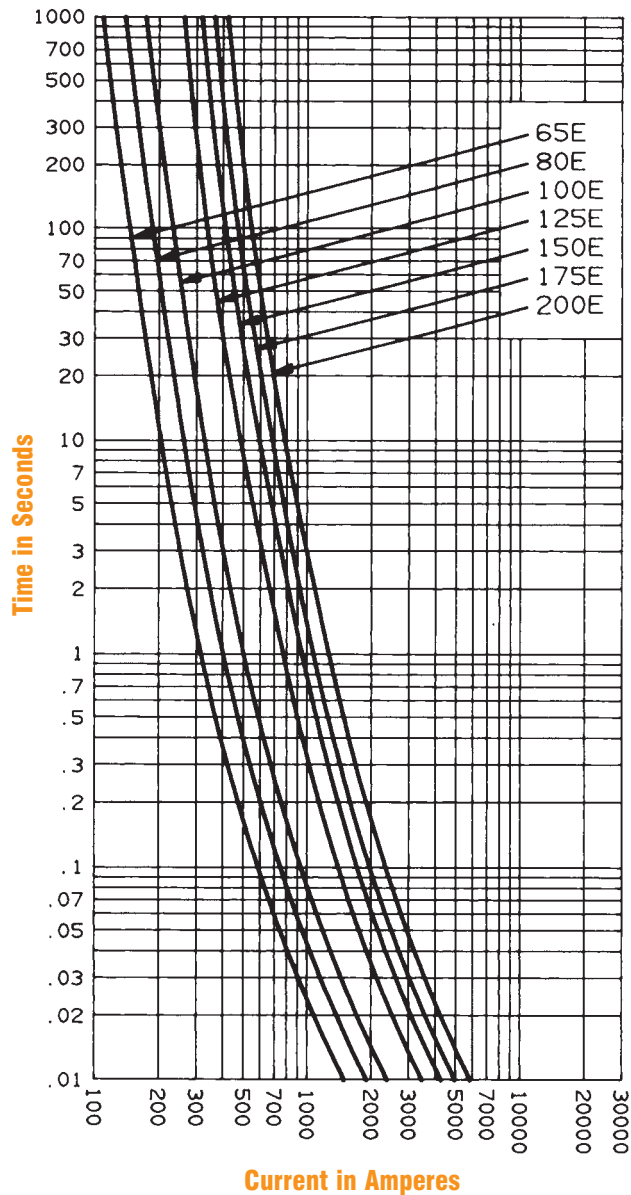
CS-3

E-RATED/MEDIUM VOLTAGE FUSES/A055F

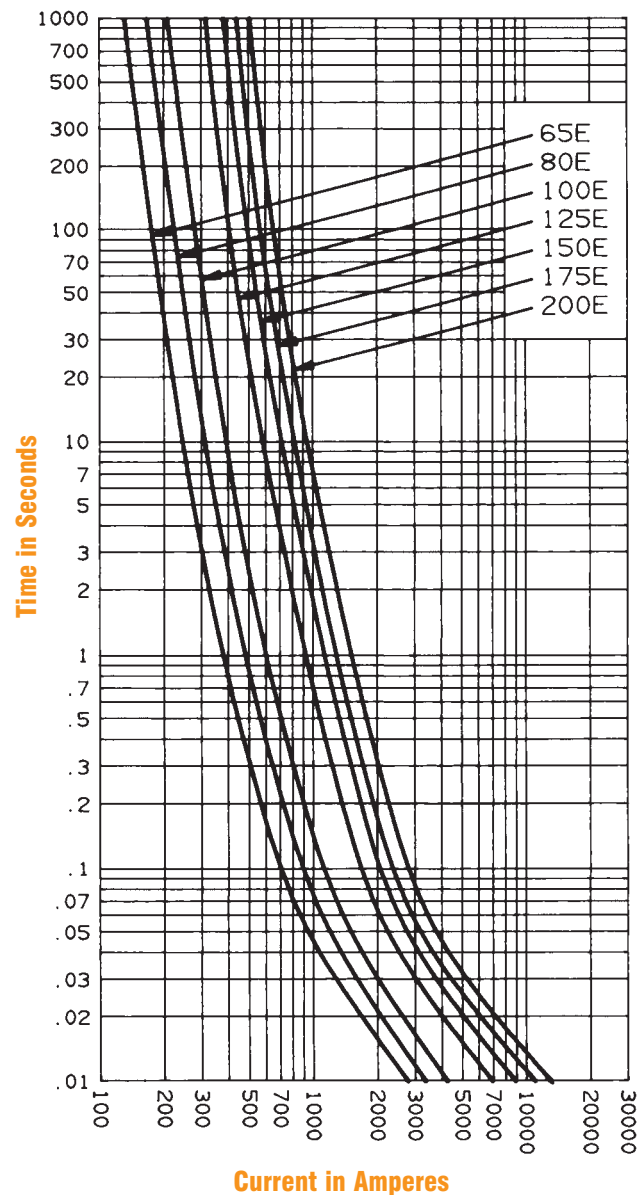
A155F1DORO – 65E to 100E and A155F2DORO – 125E to 200E

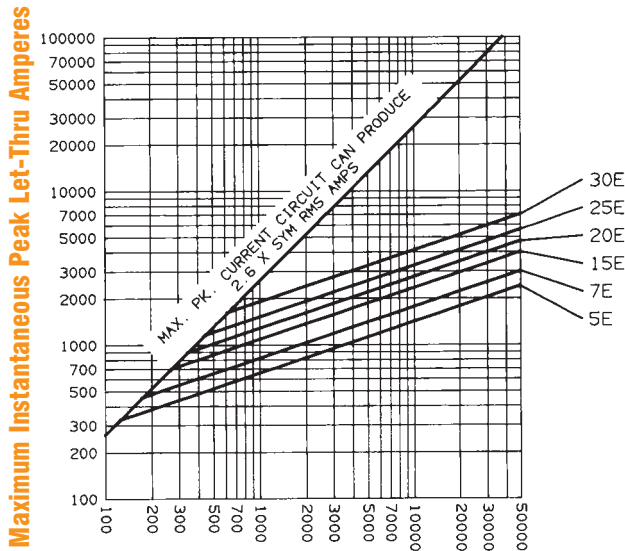
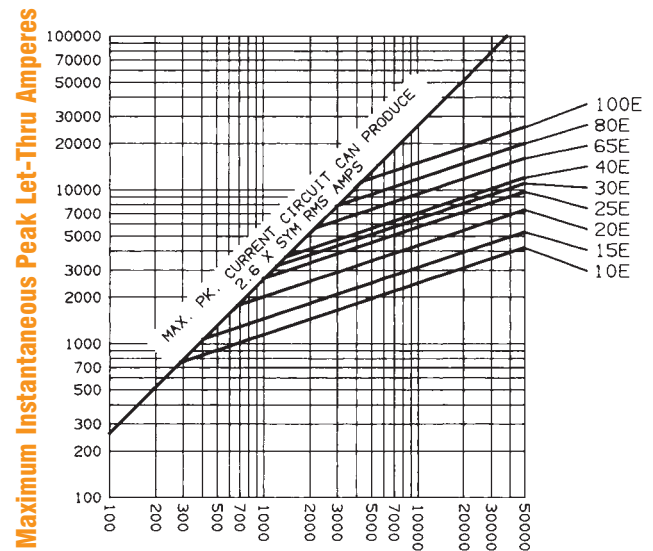
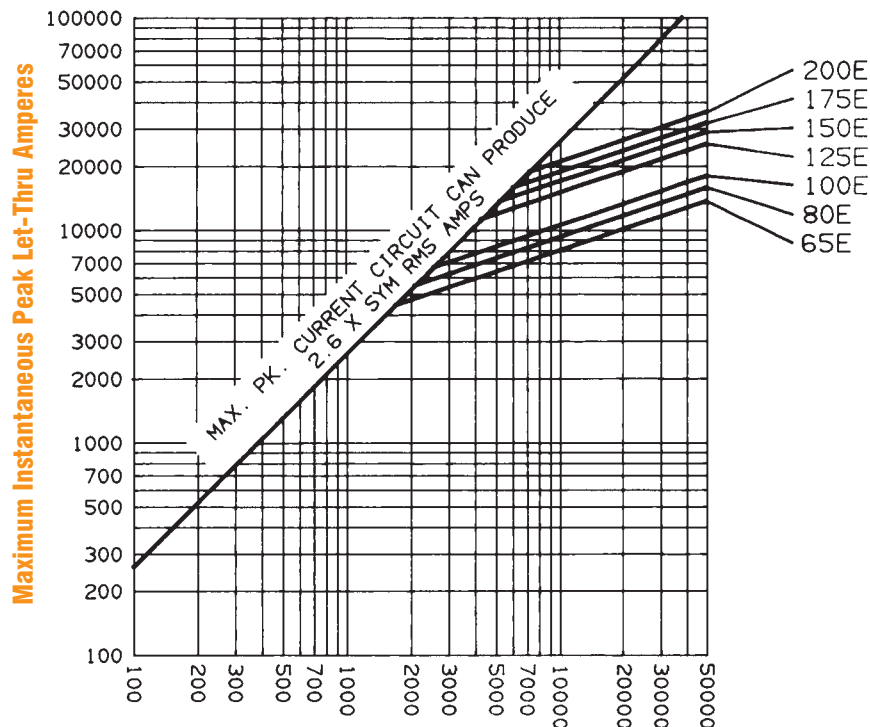
A155F1DORO – 65E to 100E and A155F2DORO – 125E to 200E

Minimum Melting Time – Current Data, 15.5kV Fuses



Total Clearing Time – Current Data, 15.5kV Fuses



CS-3**E-RATED/MEDIUM VOLTAGE FUSES/A055F****A155F1CORO – 5E to 30E****Peak Let-Thru Current Data, 15.5kV CS-3 Fuses****Available Current in RMS Symmetrical Amperes****A155F1DORO – 10E to 50E
A155F2DORO – 65E to 100E****Peak Let-Thru Current Data, 15.5kV CS-3 Fuses****Available Current in RMS Symmetrical Amperes****A155F1DORO – 65E to 100E
A155F2DORO – 125E to 200E****Peak Let-Thru Current Data, 15.5kV CS-3 Fuses****Available Current in RMS Symmetrical Amperes**