

The Edison British Style semiconductor protection fuses include a 660VAC line utilizing new filler technology. These new fuses have greatly reduced peak let-through current and energy under fault conditions and hence extend fuse protection capability. They can be recognized by the letter "F" in their catalog number. Application and technical data for these 660VAC "F" fuses and the original line of 240VAC British "T" type fuses are presented on the following pages.

"F" Range

This is a superior design of fuses in the same physical package as the "T" range.

Equivalent Ratings

This table shows the suggested equivalent ratings to replace a "T" with an "F".

Because of the new design technology it has been possible to obtain the equivalent energy let-through I^2t with a higher amp rated fuse hence reducing the possibility of premature operation.

This table gives a range of suggested acceptable new "F" type to replace the earlier "T" type.

To upgrade your protection to the new "F" series select a fuse rating within the range shown that suits your circuit inrush requirements. You will still have the same or better protection of your semiconductor devices.

It should be remembered that to protect devices we must consider the energy let-through of the selected fuse. The label amp rating will relate to the full load current and the circuit inrush amps.

The suggested replacements are based on:

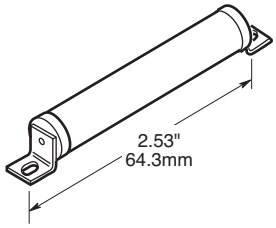
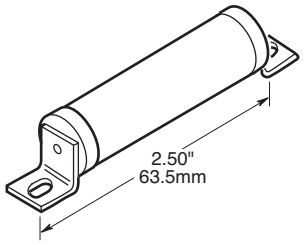
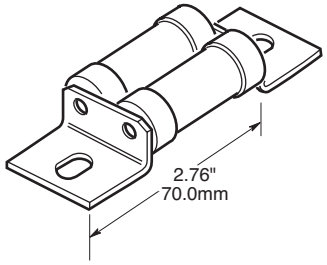
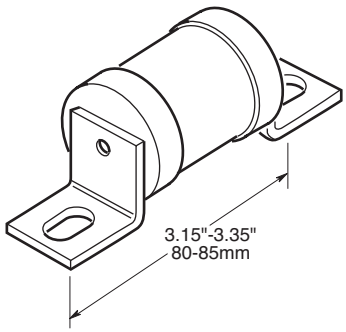
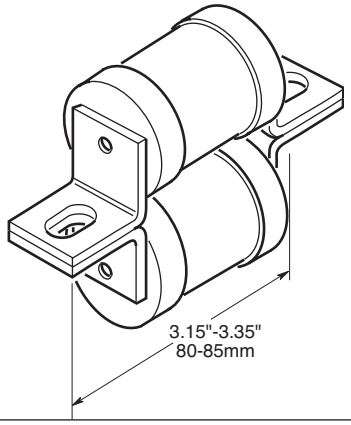
a. Similar surge withstand to normal circuit overloads.
b. Lower total I^2t let-through.

This gives enhanced reliability due to the use of a higher current rated fuse which avoids nuisance operation and still gives improved short-circuit protection.

Replacement Table — "T" to "F" (660V)

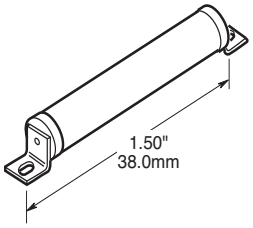
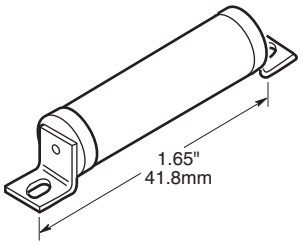
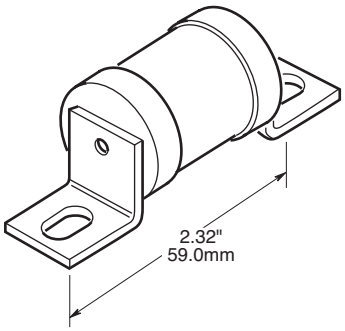
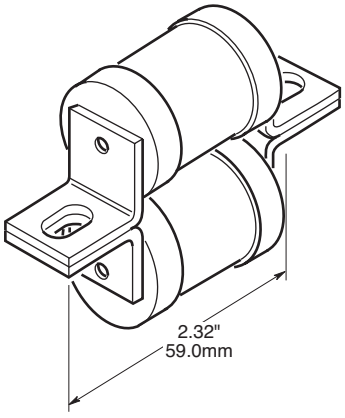
	New "F" Range	
Earlier "T" Range	Lowest Rating	Highest Rating
6CT	6FC	6FC
10CT	10FC	10FC
12CT	12FC	12FC
16CT	16FC	16FC
20CT	20FC	20FC
25ET	–	–
32ET	35FE	35FE
35ET	35FE	40FE
40ET	40FE	45FE
45ET	45FE	50FE
56ET	63FE	63FE
63ET	63FE	71FE
–	–	80FE
–	–	90FE
80ET	80FE	100FE
65EET	–	–
75EET	–	–
90EET	–	100FEE
110EET	–	120FEE
–	–	140FEE
140EET	140FEE	160FEE
–	–	180FEE
160EET	160FEE	200FEE
–	–	180FM
160MT	200FM	200FM
180MT	225FM	225FM
200MT	250FM	250FM
–	280FM	280FM
250MT	315FM	315FM
280MT	350FM	350FM
315MT	350FM	350FM
355MT	350MT	350FM
180MMT	180FM	180FM
200MMT	200FM	200FM
225MMT	225FM	225FM
280MMT	280FM	280FM
315MMT	315FM	315FM
355MMT	350FM	350FM
–	–	400FMM
–	–	450FMM
400MMT	500FMM	500FMM
450MMT	550FMM	550FMM
500MMT	630FMM	630FMM
560MMT	700FMM	700FMM
630MMT	700FMM	700FMM
710MMT	700FMM	700FMM

660 VOLT (AC) RANGE

Type	Outline	Part Number	I²t (A²SEC) Pre-arc	I²t (A²SEC) Clearing At 415V	I²t (A²SEC) Clearing At 660V	Watts Loss	D.C. Volts	Carton Qty.	Carton Weight (Kg)
FC		6FC	1.5	6	8	3	660	20	0.160
		10FC	6	18	30	3		20	0.160
		12FC	9	26	45	3		20	0.160
		16FC	13	44	65	6		20	0.160
		20FC	30	100	160	6		20	0.160
ET		25ET	25	150	250	7	450	10	0.420
		32ET	32	190	350	11		10	0.420
FE		35FE	33	130	200	9	450	10	0.420
		40FE	52	180	300	9		10	0.420
		45FE	76	270	450	11		10	0.420
		50FE	103	380	600	11		10	0.420
		63FE	135	480	750	12		10	0.420
		71FE	210	600	950	17		10	0.420
		80FE	250	900	1500	20		10	0.420
		90FE	360	1300	2100	20		10	0.420
		100FE	470	1800	2800	23		10	0.420
EET		65EET	210	2000	3000	20	450	5	0.450
		75EET	420	2600	4400	20		5	0.450
		90EET	490	3000	4500	19		5	0.450
FEE		100FEE	400	1600	2400	24	450	5	0.450
		120FEE	540	1900	3100	32		5	0.450
		140FEE	850	2500	3800	36		5	0.450
		160FEE	1000	3700	5700	46		5	0.450
		180FEE	1400	5300	8400	46		5	0.450
		200FEE	1900	7100	11400	52		5	0.450
FM		180FM	1400	7500	13500	40	450	1	0.240
		200FM	2600	10500	18500	40		1	0.240
		225FM	3700	14500	26500	44		1	0.240
		250FM	5200	20500	37500	48			
		280FM	7000	30500	55000	48		1	0.240
		315FM	10000	40000	77000	55		1	0.240
		350FM	15000	60000	105000	55		1	0.240
FMM		400FMM	10000	40000	72500	85	450	1	0.450
		450FMM	15000	60000	105000	90		1	0.450
		500FMM	20000	82000	15000	100		1	0.450
		550FMM	30000	120000	215000	100		1	0.450
		630FMM	45000	180000	310000	100		1	0.450
		700FMM	60000	245000	420000	120		1	0.450

- Interrupting rating 200kA RMS Symmetrical.
- These fuses meet the requirements of BS 88 Part 4 and IEC 269-4
- Watts loss provided at rated current.
- Consult Edison for UL Recognition information

240 VOLT (AC) RANGE

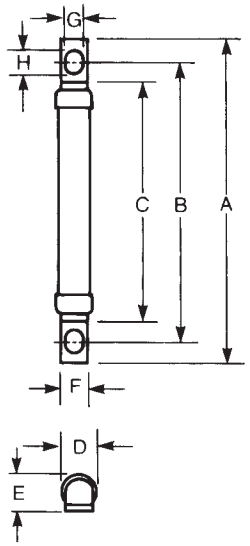
Type	Outline	Part Number	I^2t (A^2SEC) Pre-arc	I^2t (A^2SEC) Clearing At 120V	I^2t (A^2SEC) Clearing At 240V	Watts Loss	D.C. Volts	Carton Qty.	Carton Weight (Kg)
LCT		6LCT	2	6	9	1.0		20	0.110
		10LCT	3.8	12	22	2.5		20	0.110
		12LCT	7	22	32	2.5	200	20	0.110
		16LCT	20	50	100	2.5		20	0.110
		20LCT	25	80	160	4.0		20	0.110
LET		7LET	1.7	10	17	1.5		10	0.310
		10LET	3.8	23	35	1.8		10	0.310
		12LET	7	42	58	2		10	0.310
		16LET	15	70	140	2.5		10	0.310
		25LET	18	120	250	4.0		10	0.310
		32LET	32	200	450	5.0		10	0.310
		35LET	50	320	600	5.0	140	10	0.310
		50LET	100	500	1400	7.0		10	0.310
		63LET	180	1100	2200	9.0		10	0.310
		80LET	300	1900	3800	10.0		10	0.310
		100LET	600	3800	7500	10.0		10	0.310
		125LET	600	3800	7500	10.0		10	0.310
		160LET	1100	7000	18000	20.0		10	0.310
		180LET	1600	12000	29000	21.0		10	0.310
LMT		160LMT	1100	7000	16000	17.0		1	0.180
		200LMT	1500	10000	20000	28.0		1	0.180
		250LMT	3200	20000	40000	28.0		1	0.180
		315LMT	6000	35000	75000	35.0	160	1	0.180
		355LMT	8000	50000	100000	35.0		1	0.180
		400LMT	14000	70000	160000	40.0		1	0.180
		450LMT	18000	100000	220000	42.0		1	0.180
LMMT		400LMMT	6000	35000	80000	60.0		1	0.370
		400LMMT	14000	80000	170000	64.0		1	0.370
		400LMMT	24000	150000	300000	75.0	160	1	0.370
		400LMMT	32000	200000	460000	77.0		1	0.370
		400LMMT	52000	300000	600000	82.0		1	0.370
		400LMMT	75000	400000	800000	97.0		1	0.370

- Interrupting rating 200kA RMS Symmetrical.
- Watts loss provided at rated current.
- All fuses above have been tested to 318VAC.
- These fuses meet the requirements of BS 88 Part 4 and IEC 269-4
- UL Recognition on LET and LMT. Others pending – Consult Edison.

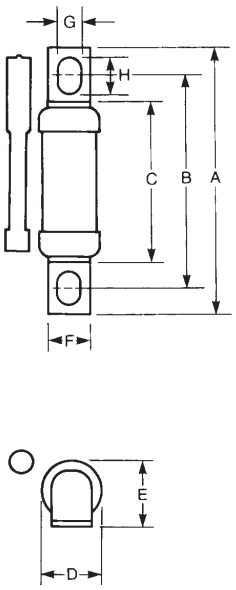
DIMENSIONS in Millimeters

Type	A	B	C	D	E	F	G	H
FC	74.6	64.3	54.8	8.7	8.7	6.4	4	5.5
LCT	47	38	28	8.4	8.7	6.4	4	5.5
FE & ET	77	63.5	48	17.7	19.1	12.7	7.1	9.7
LET	56	41.8	26.2	17.7	19.1	12.7	7.1	9.7
FEE & EET	94	70	46	37	19	31.8	8.7	11.9
FM	113	80-85	50	38	41.5	25.4	10.3	14
LMT	84	59	31	38.1	41	25.4	10.3	13.5
FMM	113	80-85	50	83	38	25.4	10.3	14
LMMT	84	59	31	83	38	25.4	10.3	13.5

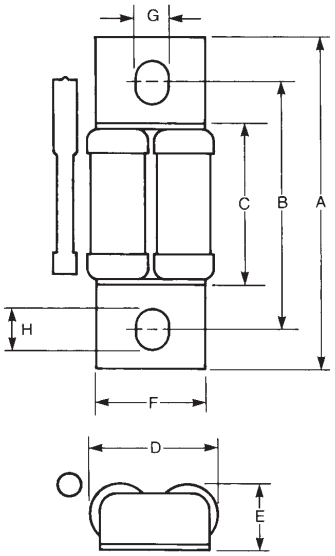
FC & LCT



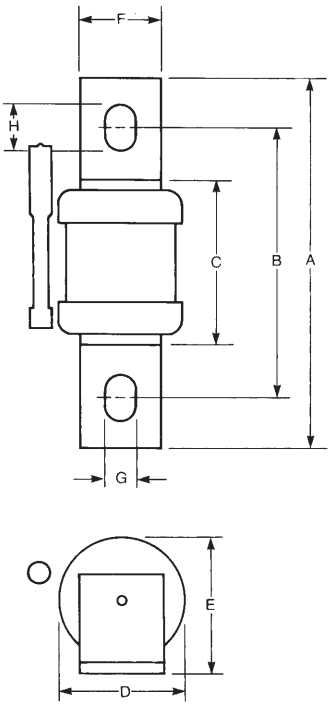
FE, ET & LET



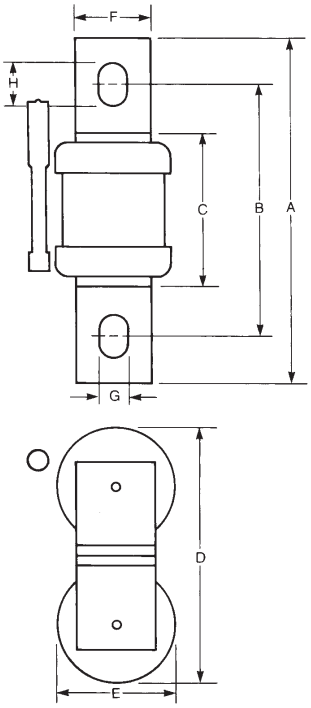
FEE & EET

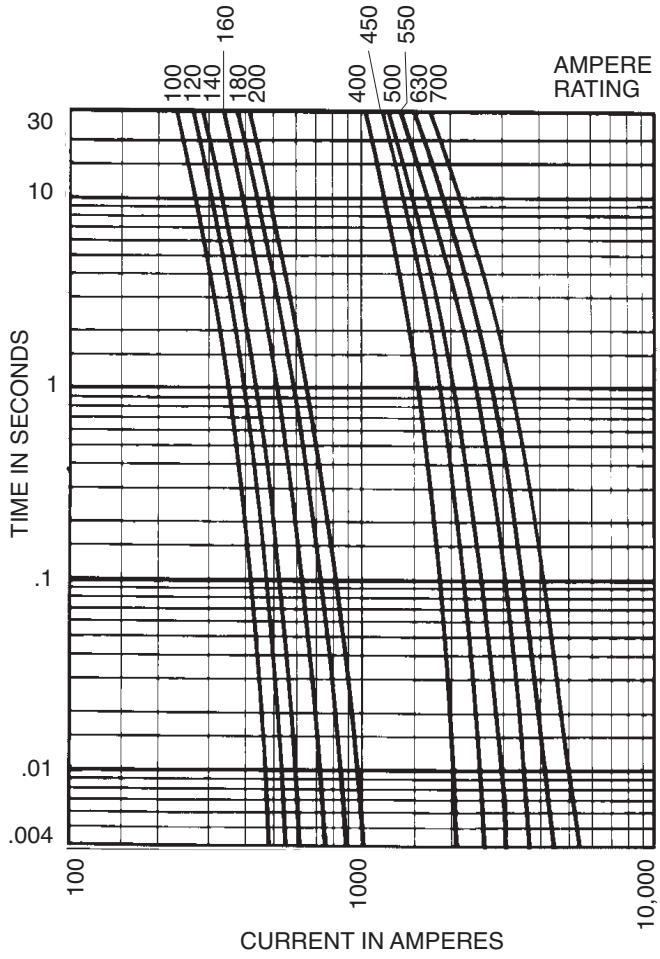


FM & LMT



FMM & LMMT



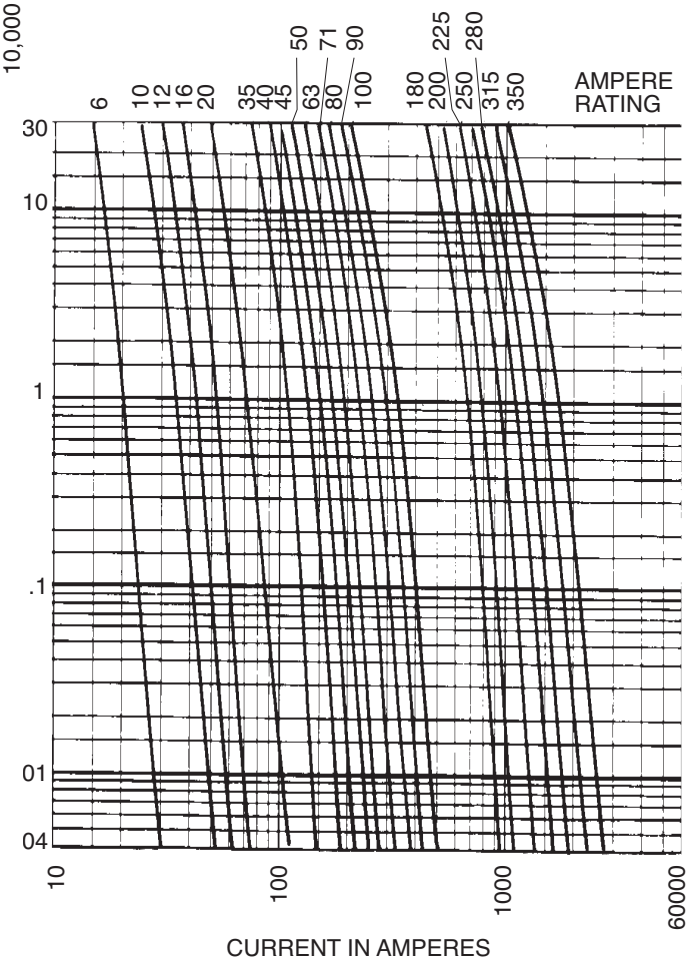


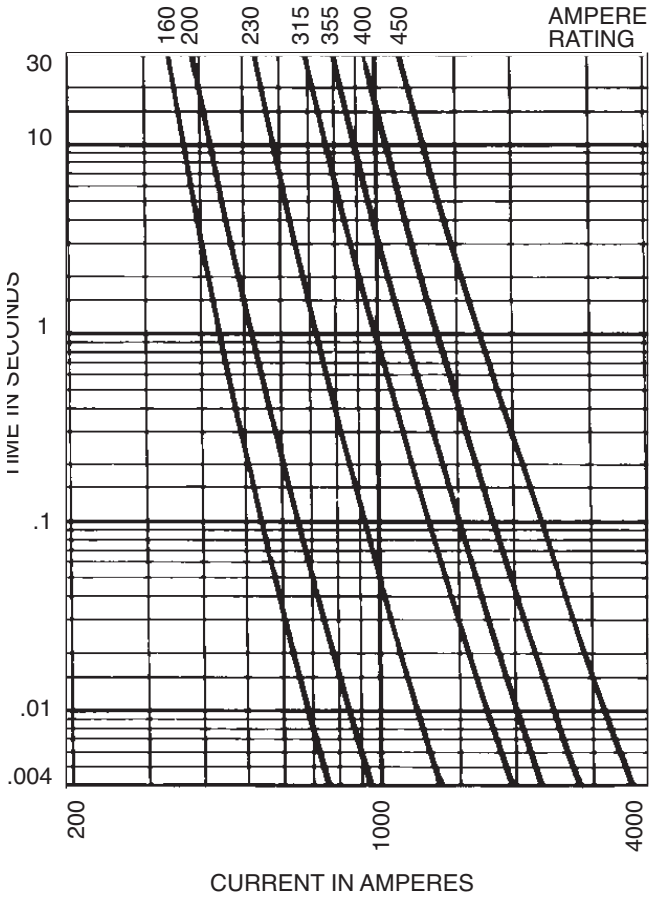
660V Time-Current Curves

FEE (100-200A)
FMM (400-700A)

660V Time-Current Curves

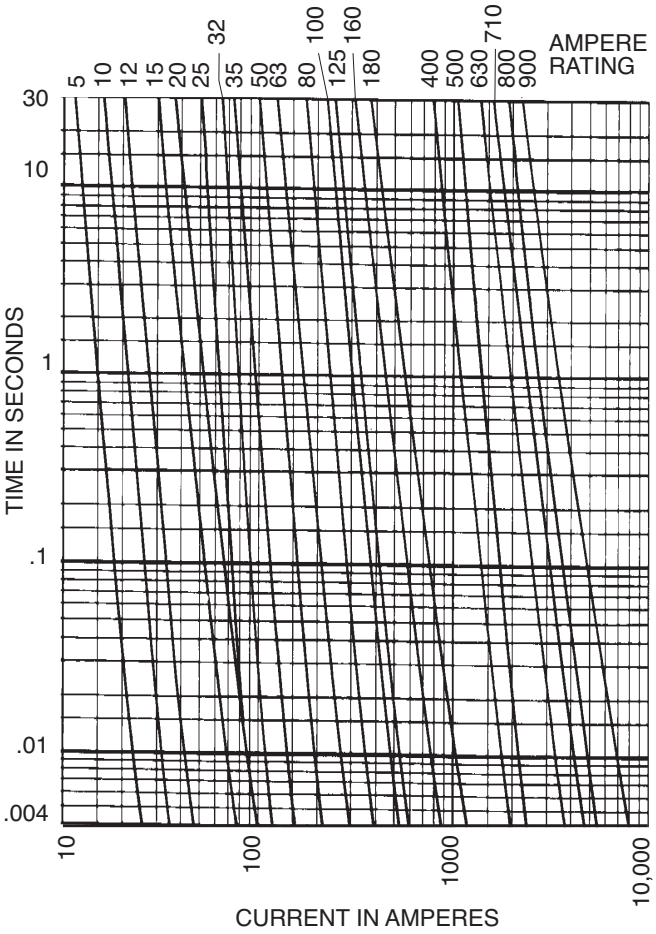
FC (6-20A)
FE (35-100A)
FM (180-350A)





240V Time-Current Curves

LMT (160-450A)



240V Time-Current Curves

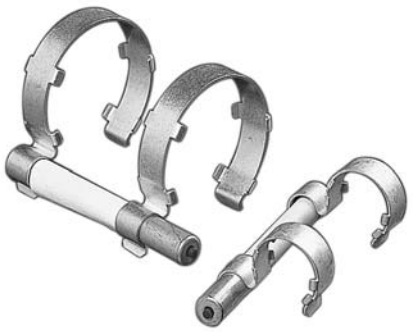
LCT (6-20A)
LET (25-180A)
LMMT (400-900A)

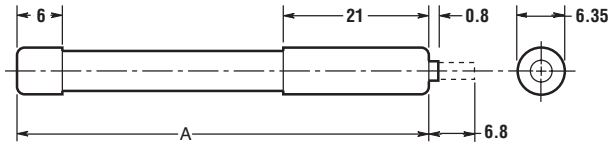
Indicator System
Trip-Indicators

Trip-indicators are available for use in parallel with the main fuse. They can either be attached to the associated fuse or mounted separately in panel mounted fuse clips, reference CL1. A push-on adapter and microswitch attachment is available for use with the trip indicator to give the facility of remote indication, reference MAI.

Fuse ratings of 20A and below cannot usually accommodate a trip-indicator.

When a trip-indicator is to be attached to the main fuse an accessory pack comprising a pair of mounting clips and an appropriate trip indicator would be required. The clips are snapped onto the fuse end caps and the indicator is pressed into clips as shown.





Dimensions in mm

Electrical Specifications

Type	TI500	TI700
Maximum RMS Voltage	500	700
Maximum Peak Voltage	700	1000
Maximum DC Voltage	130	350
Cold Resistance (ohms)	0.3	0.45
Maximum permissible steady-state current	1.5A	1.5A
Interrupting Capacity (RMS Symm.)	100,000	100,000
Pre-Arcing I^2t (A^2S)	23	23
Total I^2t (max volts) (A^2S)	46	46

Fuse Indicator Kits

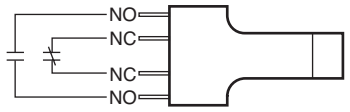
Kit. Ref.	Details	RMS Volts	For use with Fuse Ref.
EC-250	Fuse Mount	250	LET
MC250	Indicator Kits	250	LMT & LMMT
EC-600	(Inc. one indicator	660	FE, FEE, ET, & EET
MC600	and two clips)	660	FM & FMM
MC700		700	MT & MMT

Trip-Indicator Data

Ref.	Dim. "A" (mm)	RMS Volts
TI250	37.6	250
TI500	47.5	500
TI600	55.7	600
TI700	61.8	700
TI1100	98.4	1100
TI1500	120.6	1500
TI2000	147.5	2000
TI2500	198.3	2500

Microswitch Adapter
MAI

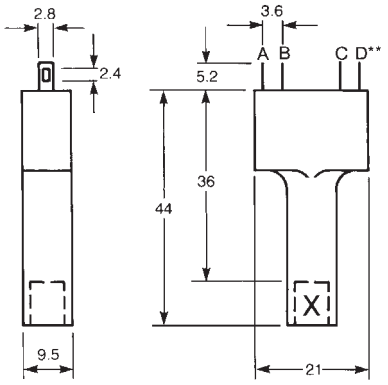
Edison is offering a microswitch, complete with adapter for securing the indicator. The microswitch is provided with double pole, single throw contacts, having both a normally open and a normally closed position. A special material has been employed in the construction of the adapter to provide reliable operation in the range of temperatures associated with standard operating conditions and during fuse operation.



Terminal Arrangement

Microswitch and Adapter Type MAI

Current Rating:	
AC 50/60Hz resistive load @ 250V RMS	4A
AC 50/60Hz resistive load @ 127V RMS	6A
DC, resistive load @ 110V DC	0.7A DC
DC, resistive load @ 30V DC	2A DC
Maximum Working Voltage:	
Contact-to-contact (RMS)	1000V
Contact-to-contact (RMS)	1500V
Maximum DC Volts:	110V DC



Dimensions in mm