PCS Semiconductor PC Mount Fuses

Semiconductor protection fuses for direct mounting on printed circuit boards.

Mersen's PCS series of extremely fast-acting, direct-mountable fuses address the increasing need for electrical protection at the PC board as current and voltage requirements push higher. These fuses help printed circuit board manufacturers reduce parts by eliminating clips and fuse blocks and allowing automated assembly. PCS fuses are AC and DC rated and are extremely current-limiting. They will protect semiconductors, main frame boards, circuit breakers with low interrupting rating and other critical components. PCS fuses bring I²t protection, higher voltage and interrupting ratings to the board itself and are UL Component Recognized.

Highlights:

- Extremely fast-acting
- PC board mount
- Three mounting styles

Applications:

- Protection of semiconductors, circuit breakers, critical components

Ratings:

Volts	: 600VAC / DC
Amps	: 5 to 40A
I.R.	: 200kA I.R. AC
	: 100kA I.R. DC
L/R	: ≤10ms

Catalog Numbers (amps)

Slot Mount	
PCS5-R	PCS20-R
PCS8-R	PCS25-R
PCS10-R	PCS30-R
PCS12-R	PCS35-R
PCS15-R	PCS40-R

Double Hole Mount	
PCS5-H	PCS20-H
PCS8-H	PCS25-H
PCS10-H	PCS30-H
PCS12-H	PCS35-H
PCS15-H	PCS40-H

Surface Mount	
PCS5-S	PCS20-S
PCS8-S	PCS25-S
PCS10-S	PCS30-S
PCS12-S	PCS35-S
PCS15-S	PCS40-S

Dimensions of the PCS Series are found on page C14

Watts Loss Data

Ampere Rating	Watts Loss @ 80% Rating (w)	Watts Loss @ 100% Rating (w)
5	0.5	0.7
10	0.9	1.5
15	1.9	3.0
20	2.6	4.4
25	2.9	5.3
30	3.0	5.8
35	3.3	6.4
40	3.6	7.0

I²t Data, 100kA

Ampere Rating	600VAC		600VDC L/R =10ms
	Melting I²t (A²s)	Clearing I²t (A²s)	Clearing I²t (A²s)
5	5	60	40
8	6.5	70	42
10	10	110	70
12	17	150	90
15	26	180	110
20	41	330	200
25	69	440	260
30	132	860	520
35	197	1300	780
40	276	1800	1100

Approvals:

- UL Recognized Components File E60314

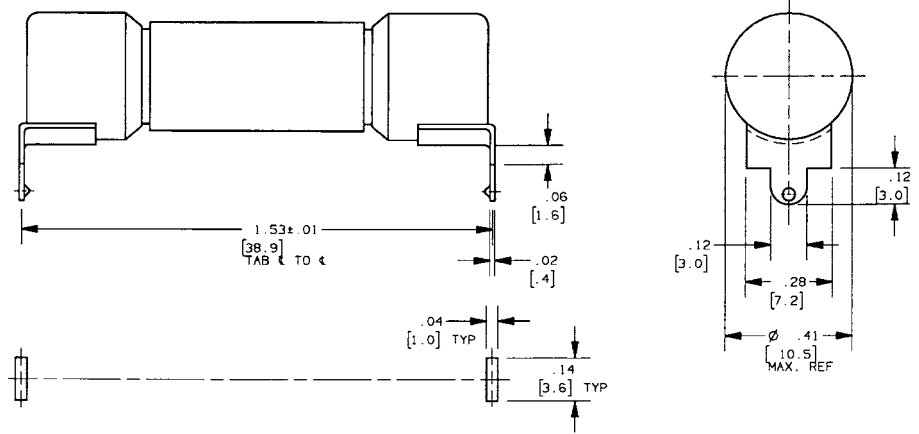**mersen**

Outline Dimensions

Slot Mount (Rectangular Holes)

PCF1-R thru PCF30-R
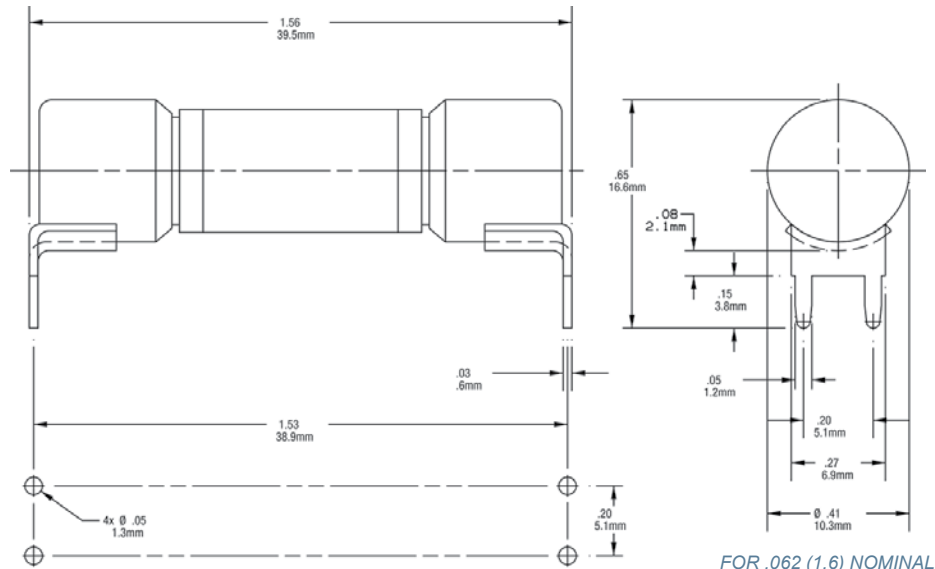PCS5-R thru PCS40-R
PCT1-R thru PCT30-R

MOUNTING HOLE DETAIL

FOR .062 (1.6) NOMINAL CIRCUIT BOARD THICKNESS

Double Hole Mount (Round Holes)

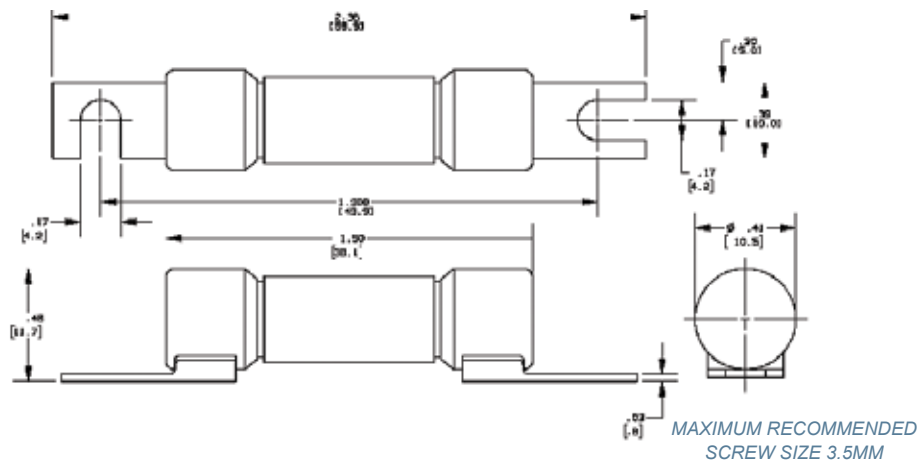PCF1-H thru PCF30-H
PCS5-H thru PCS40-H
PCT1-H thru PCT30-H

MOUNTING HOLE DETAIL

FOR .062 (1.6) NOMINAL CIRCUIT BOARD THICKNESS

Surface (Screw) Mount

PCF1-S thru PCF30-S
PCS5-S thru PCS40-S
PCT1-S thru PCT30-S

MAXIMUM RECOMMENDED SCREW SIZE 3.5MM

MERSEN