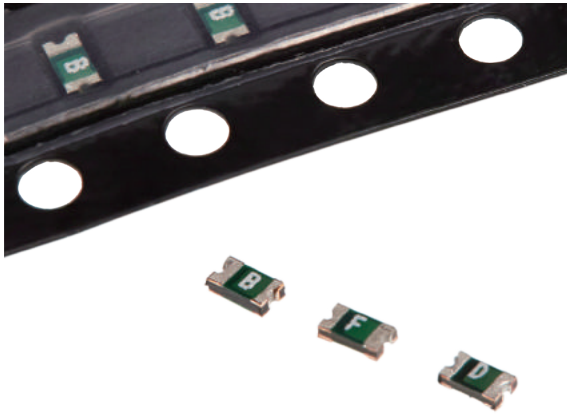


# Surface Mount PPTC

## FSMD0603 Series



### Application

All high-density boards

### Product Features

Small surface mountable, Solid state, Faster time to trip than standard SMD devices, Lower resistance than standard SMD devices



### Operation Current

0.01A~0.20A

### Maximum Voltage

9V~60V<sub>DC</sub>



### Temperature Range

-40°C to 85°C

### Agency Recognition

AGENCY	AGENCY FILE NUMBER
	UL(E211981)
	C-UL(E211981)
	TÜV (R50090556)



## Electrical Characteristics (23°C)

Part Number	Hold Current	Trip Current	Rated Voltage	Max. Current	Typ. Power	Max. Time to trip		Resistance	
						Current	Time	R <sub>MIN</sub>	R <sub>1MAX</sub>
						I <sub>H</sub> , A	I <sub>T</sub> , A	V <sub>MAX</sub> , V <sub>DC</sub>	I <sub>MAX</sub> , A
FSMD001-0603-R	0.01	0.03	60	40	0.5	0.20	1.00	15.00	100.00
FSMD002-0603-R	0.02	0.06	60	40	0.5	0.20	1.00	12.00	70.00
FSMD003-0603-R	0.03	0.09	30	40	0.5	0.20	1.00	6.00	50.00
FSMD004-0603-R	0.04	0.12	24	40	0.5	0.20	1.00	4.00	40.00
FSMD005-0603-R	0.05	0.15	15	40	0.5	0.50	0.10	3.80	30.00
FSMD010-0603-R	0.10	0.25	15	40	0.5	0.70	0.10	0.90	8.00
FSMD012-0603-R	0.12	0.30	9	40	0.5	0.80	0.10	1.10	5.80
FSMD016-0603-R	0.16	0.40	9	40	0.5	1.00	0.10	1.00	4.20
FSMD020-0603-R	0.20	0.45	9	40	0.5	2.00	0.10	0.55	3.50

## Thermal Derating for PPTC Device at Various Ambient Temperatures

TEMPERATURE	-40°C	-20°C	0°C	23°C	30°C	40°C	50°C	60°C	70°C	85°C
DERATING %	157%	137%	118%	100%	89%	80%	70%	60%	51%	37%

## Typical Time-To-Trip at 23°C

- A = FSMD001-0603-R
- B = FSMD002-0603-R
- C = FSMD003-0603-R
- D = FSMD004-0603-R
- E = FSMD005-0603-R
- F = FSMD010-0603-R
- G = FSMD012-0603-R
- H = FSMD016-0603-R
- I = FSMD020-0603-R

