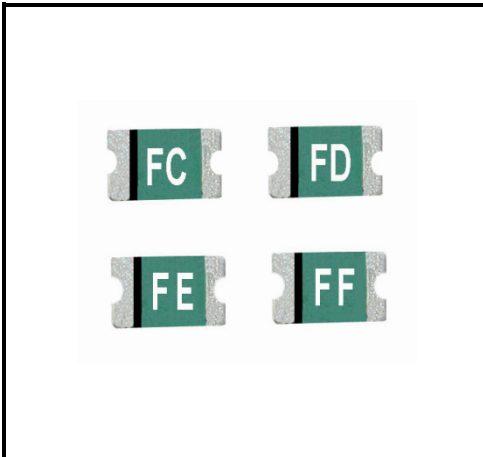


FSMD1206 Series



RoHS Compliant & Halogen Free

Application : All high-density boards

Product Features : Small surface mount, Solid state

Faster time to trip than standard SMD devices

Lower resistance than standard SMD devices

Operation Current : 0.05A~2.00A

Maximum Voltage : 6V~60V_{DC}

Temperature Range : -40°C to 85°C

Agency Recognition : UL (E211981)

C-UL (E211981)

TÜV (R50090556)

Electrical Characteristics(23°C)

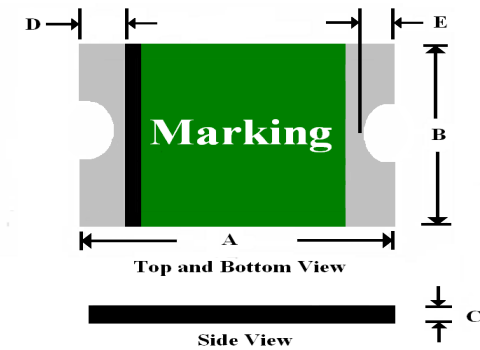
Part Number	Hold Current	Trip Current	Rated Voltage	Max Current	Typ. Power	Max Time to Trip		Resistance	
	I _H , A	I _T , A	V _{MAX} , V _{DC}	I _{MAX} , A	Pd, W	Current	Time	R _{MIN}	R1 _{MAX}
						A	Sec	Ohms	Ohms
FSMD005-1206-R	0.05	0.15	60	100	0.4	0.25	1.50	3.600	50.000
FSMD010-1206-R	0.10	0.25	60	100	0.4	0.50	1.00	1.600	15.000
FSMD012-1206-R	0.12	0.39	48	100	0.6	1.00	0.20	1.400	6.500
FSMD016-1206-R	0.16	0.45	48	100	0.6	1.00	0.30	1.100	5.000
FSMD020-1206-R	0.20	0.40	30	100	0.4	8.00	0.10	0.600	2.500
FSMD025-1206-R	0.25	0.50	16	100	0.6	8.00	0.08	0.550	2.300
FSMD025-24-1206-R	0.25	0.50	24	100	0.6	8.00	0.08	0.550	2.300
FSMD035-1206-R	0.35	0.75	16	100	0.4	8.00	0.10	0.300	1.200
FSMD035-30-1206R	0.35	0.75	30	100	0.6	8.00	0.10	0.300	1.200
FSMD050-1206-R	0.50	1.00	8	100	0.4	8.00	0.10	0.150	0.700
FSMD050-24-1206R	0.50	1.00	24	100	0.6	8.00	0.10	0.150	0.750
FSMD075-1206R	0.75	1.50	8	100	0.6	8.00	0.20	0.090	0.290
FSMD075-16-1206R	0.75	1.50	16	100	0.6	8.00	0.20	0.090	0.290
FSMD100-1206R	1.00	1.80	6	100	0.6	8.00	0.30	0.055	0.210
FSMD110-1206R	1.10	2.20	8	100	0.8	8.00	0.30	0.040	0.180
FSMD150-1206R	1.50	3.00	8	100	0.8	8.00	1.00	0.040	0.120
FSMD200-1206R	2.00	3.50	6	100	0.8	8.00	1.50	0.018	0.080

Termination pad characteristics
Termination pad materials : Pure Tin

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 %	145%	130%	115%	100%	92%	84%	78%	69%	62%	50%

FSMD1206 Product Dimensions (mm)

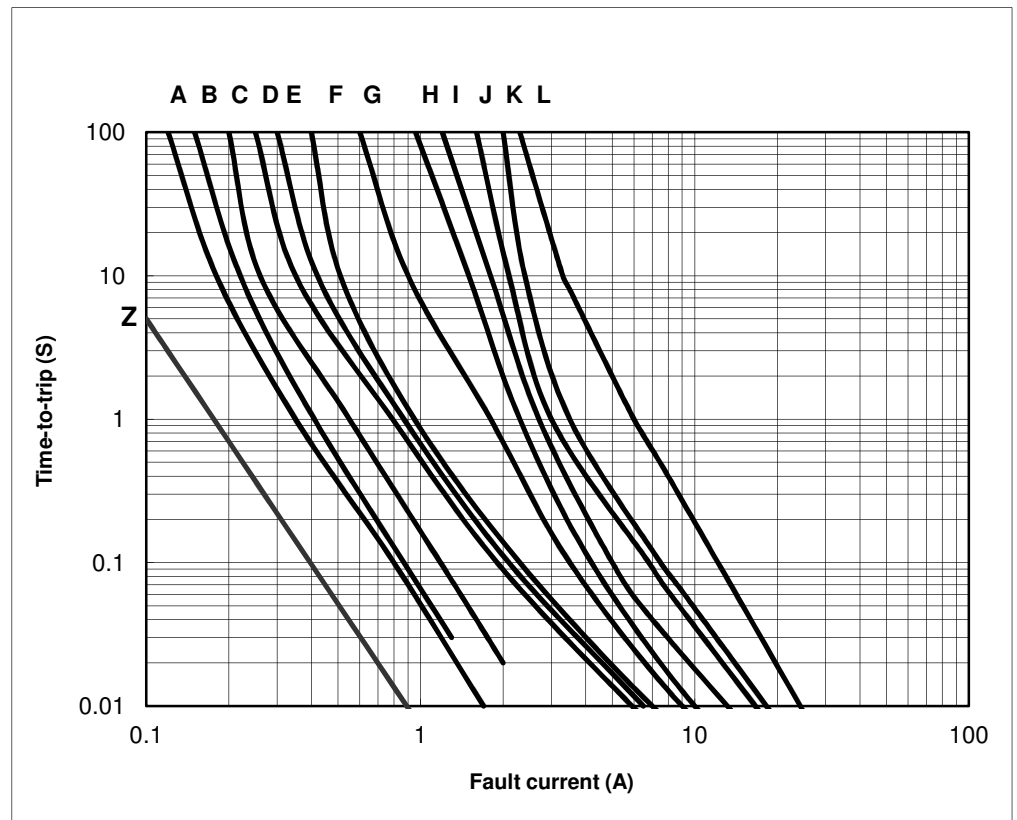


Part Number	A		B		C		D		E	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
FSMD005-1206-R	3.00	3.50	1.50	1.80	0.45	0.85	0.10	0.75	0.10	0.45
FSMD010-1206-R	3.00	3.50	1.50	1.80	0.45	0.85	0.10	0.75	0.10	0.45
FSMD012-1206-R	3.00	3.50	1.50	1.80	0.45	0.85	0.10	0.75	0.10	0.45
FSMD016-1206-R	3.00	3.50	1.50	1.80	0.45	0.75	0.10	0.75	0.10	0.45
FSMD020-1206-R	3.00	3.50	1.50	1.80	0.45	0.75	0.10	0.75	0.10	0.45
FSMD025-1206-R	3.00	3.50	1.50	1.80	0.45	0.75	0.10	0.75	0.10	0.45
FSMD025-24-1206-R	3.00	3.50	1.50	1.80	0.45	0.75	0.10	0.75	0.10	0.45
FSMD035-1206-R	3.00	3.50	1.50	1.80	0.30	0.75	0.10	0.75	0.10	0.45
FSMD035-30-1206R	3.00	3.50	1.50	1.80	0.90	1.30	0.25	0.75	0.10	0.45
FSMD050-1206-R	3.00	3.50	1.50	1.80	0.25	0.55	0.10	0.75	0.10	0.45
FSMD050-24-1206R	3.00	3.50	1.50	1.80	0.80	1.20	0.25	0.75	0.10	0.45
FSMD075-1206R	3.00	3.50	1.50	1.80	0.45	1.25	0.25	0.75	0.10	0.45
FSMD075-16-1206R	3.00	3.50	1.50	1.80	0.45	1.25	0.25	0.75	0.10	0.45
FSMD100-1206R	3.00	3.50	1.50	1.80	0.45	1.00	0.25	0.75	0.10	0.45
FSMD110-1206R	3.00	3.50	1.50	1.80	0.45	1.00	0.25	0.75	0.10	0.45
FSMD150-1206R	3.00	3.50	1.50	1.80	0.80	1.40	0.25	0.75	0.10	0.45
FSMD200-1206R	3.00	3.50	1.50	1.80	0.85	1.60	0.25	0.75	0.10	0.45

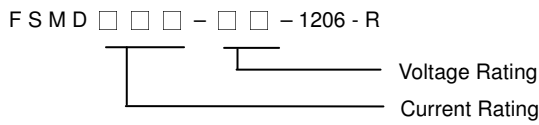
*For Reflow Soldering Profile information, please refer to P.74 " IV APPENDIX - SMD PRODUCT SOLDER REFLOW RECOMMENDATIONS "

Typical Time-To-Trip at 23°C

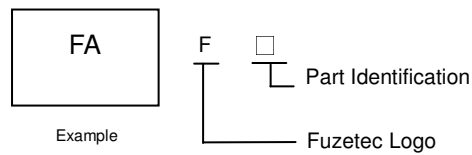
- Z= FSMD005-1206-R
- A= FSMD010-1206-R
- B= FSMD012-1206-R
- C= FSMD016-1206-R
- D= FSMD020-1206-R
- E= FSMD025-1206-R/
025-24-1206-R
- F= FSMD035-1206-R/
035-60-1206R
- G= FSMD050-1206-R/
FSMD050-24-1206R
- H= FSMD075-1206R /
FSMD075-16-1206R
- I= FSMD100-1206R
- J= FSMD110-1206R
- K= FSMD150-1206R
- L= FSMD200-1206R



Part Numbering System




Part Marking System



FZ = FSMD005-1206-R
 FA = FSMD010-1206-R
 FJ = FSMD012-1206-R
 FK = FSMD016-1206-R
 FB = FSMD020-1206-R
 FL = FSMD025-1206-R
 FP = FSMD025-24-1206-R
 FC = FSMD035-1206-R
 FM = FSMD035-30-1206R
 FD = FSMD050-1206-R
 FN = FSMD050-24-1206R
 FE = FSMD075-1206R
 FO = FSMD075-16-1206R
 FF = FSMD100-1206R
 FG = FSMD110-1206R
 FH = FSMD150-1206R
 FI = FSMD200-1206R

Standard Package

FSMD005-1206-R~ FSMD025-24-1206-R	:	3.0K Reel/Tape
FSMD035-1206-R	:	4.0K Reel/Tape
FSMD035-30-1206R	:	3.0K Reel/Tape
FSMD050-1206-R	:	4.0K Reel/Tape
FSMD050-24-1206R~FSMD110-1206R	:	3.0K Reel/Tape
FSMD150-1206R~FSMD200-1206R	:	2.0K Reel/Tape

- Warning:** - Operation beyond the specified maximum ratings or improper use may result in damage and possible electrical arcing and/or flame.
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- PPTC device are intended for occasional overcurrent protection. Application for repeated overcurrent condition and/or prolonged trip are not anticipated.
 - Avoid contact of PPTC device with chemical solvent. Prolonged contact will damage the device performance.