

Features

- ◆ Surface Mount Devices
- ◆ Standard 0603mils footprint
- ◆ Surface mount packaging for automated assembly
- ◆ Compatible with Pb and Pb-free solder reflow profiles.

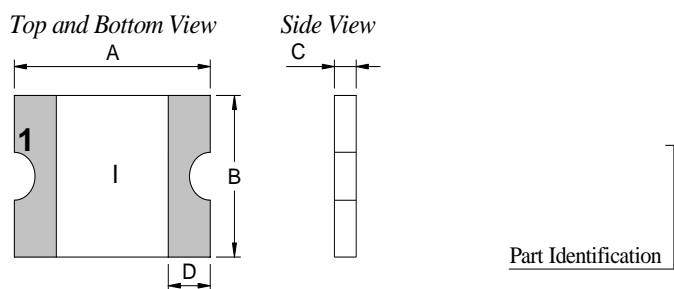
Applications

- ◆ Mobile phones
- ◆ PC motherboards
- ◆ PDA's/Digital cameras
- ◆ USB port protection
- ◆ HDMI source protection

Electrical Characteristics

P/N	I _H (A)	I _T (A)	V _{max.} (V)	I _{max.} (A)	Time to Trip		Pd _{typ.} (W)	R _{min.} (Ω)	R1 _{max.} (Ω)
					(A)	(Sec.)			
TLC-FSMD010	0.10	0.30	15	40	0.50	1.00	0.50	0.90	6.00
TLC-FSMD020	0.20	0.50	9	40	1.00	0.60	0.50	0.55	3.50
TLC-FSMD035	0.35	0.75	6	40	8.00	0.10	0.50	0.20	1.40
TLC-FSMD050	0.50	1.00	6	40	8.00	0.10	0.50	0.10	0.80

Product Dimensions & Marking (Unit: mm)

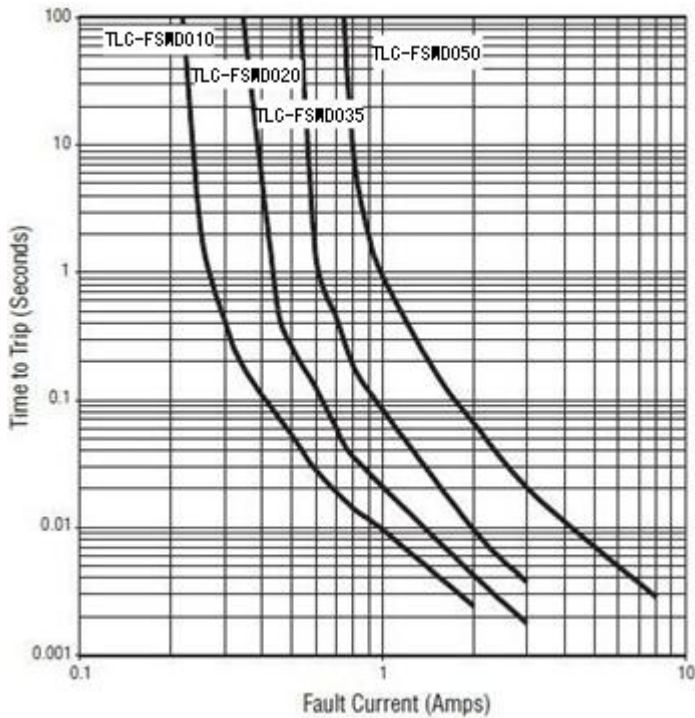


P/N	Marking	A		B		C		D
		Min.	Max.	Min.	Max.	Min.	Max.	Min.
TLC-FSMD010	I	1.45	1.85	0.65	1.05	0.35	0.85	0.20
TLC-FSMD020	—	1.45	1.85	0.65	1.05	0.30	0.75	0.20
TLC-FSMD035	II	1.45	1.85	0.65	1.05	0.30	0.75	0.20
TLC-FSMD050	•	1.45	1.85	0.65	1.05	0.60	1.00	0.20

Thermal Derating Chart – I_{hold} (Amps)

P/N	Ambient Operating Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
TLC-FSMD010	0.13	0.12	0.11	0.10	0.08	0.07	0.06	0.05	0.03
TLC-FSMD020	0.27	0.25	0.23	0.20	0.17	0.14	0.12	0.10	0.07
TLC-FSMD035	0.47	0.41	0.38	0.35	0.29	0.26	0.24	0.20	0.14
TLC-FSMD050	0.67	0.59	0.54	0.50	0.41	0.37	0.34	0.29	0.20

Typical time to trip at 25°C



The Time to Trip curves represent typical performance of a device in a simulated application environment. Actual performance in specific customer applications may differ from these values due to the influence of other variables.

Agency Approvals

- Agency Approvals: Pending
- Regulation/Standard: RoHS, Reach, HF

Standard Packaging Information

Model	Q'ty/Reel
TLC-FSMD010 ~TLC-FSMD035	5000 pcs
TLC-FSMD050	4000 pcs

Note: Reel packaging per EIA-481-1 standard

Warning:

1. Use PPTC beyond the maximum ratings or improper use may result in device damage and possible electrical arcing and flame.
2. PPTC are intended for protection against occasional over current or over temperature fault conditions and should not be used when repeated fault conditions or prolonged trip events are anticipated.
3. Device performance can be impacted negatively if devices are handled in a manner inconsistent with recommended electronic, thermal and mechanical procedures for electronic components.
4. Use PPTC with a large inductance in circuit will generate a circuit voltage ($L di/dt$) above the rated voltage of the PPTC.