

Features

- ◆ Axial leaded
- ◆ Fully compatible with current industry standards
- ◆ Very low internal resistance
- ◆ Nickel terminals
- ◆ RoHS Compliant
- ◆ Agency recognition: on Approval.

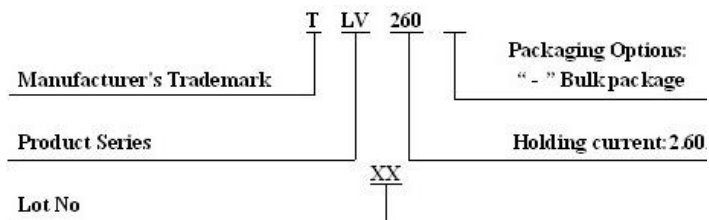
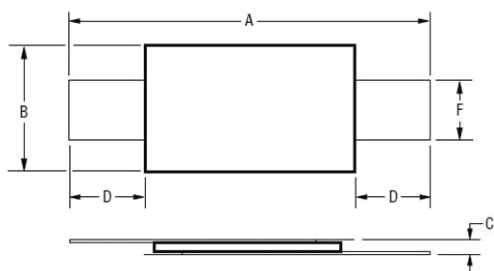
Applications

- ◆ Any application that requires protection at low resistances
- ◆ Cellular phones
- ◆ Laptop computers
- ◆ Rechargeable battery pack protection.

Electrical Characteristics (电气特性):

P/N	保持电流	跳脱电流	最大电压	最大电流	最大动作时间		消耗功率	电阻范围(Ω)		
	I _H (A)	I _T (A)	V _{max} (V)	I _{max} (A)	I(A)	T(Sec.)	Pd _{typ} (W)	R _{min}	R _{max}	R1 _{max}
TLS070	0.70	2.25	16	100	3.50	5.0	1.2	0.100	0.200	0.330
TLS100	1.00	2.50	16	100	5.00	5.0	1.2	0.070	0.130	0.215
TLS120	1.20	2.70	16	100	6.00	5.0	1.2	0.060	0.120	0.198
TLS120L	1.20	2.70	15	100	6.00	5.0	1.2	0.085	0.160	0.264
TLS150	1.50	3.00	15	100	7.5	5.0	1.3	0.040	0.080	0.149
TLS170	1.7	3.40	15	100	8.5	5.0	1.5	0.030	0.065	0.149
TLS175	1.75	3.80	15	100	9.00	4.0	1.5	0.050	0.090	0.149
TLS200	2.00	4.40	30	100	10.00	5.0	1.9	0.030	0.060	0.099
TLS350	3.50	6.30	30	100	20.00	3.0	2.5	0.017	0.031	0.051
TLS420	4.20	7.60	30	100	20.00	6.0	2.9	0.012	0.024	0.040
TVS170	1.70	3.40	16	100	8.50	5.0	2.1	0.030	0.052	0.086
TVS170N	1.70	4.10	10	100	8.50	5.0	2.1	0.018	0.032	0.053
TVS175	1.75	3.80	16	100	8.75	5.0	2.1	0.029	0.051	0.102
TVS175N	1.75	4.20	10	100	8.50	5.0	2.1	0.017	0.031	0.051
TVS200	2.00	4.40	16	100	10.00	5.0	2.3	0.020	0.040	0.080
TVS210	2.10	4.70	16	100	10.50	5.0	2.4	0.018	0.030	0.050
TVS210N	2.10	5.00	10	100	10.50	5.0	2.4	0.010	0.020	0.033
TVS230	2.30	5.20	10	100	12.50	5.0	2.6	0.018	0.036	0.059
TLV175	1.75	3.80	16	100	8.75	5.0	1.7	0.030	0.065	0.107
TLV180	1.80	3.80	16	100	9.00	5.0	1.7	0.030	0.060	0.099
TLV190	1.90	4.20	16	100	9.50	5.0	1.8	0.025	0.045	0.074
TLV190L	1.90	4.20	16	100	9.50	5.0	1.8	0.007	0.014	0.074
TLV200	2.00	4.40	16	100	10.00	5.0	1.9	0.020	0.040	0.090
TLV210	2.10	4.40	16	100	10.50	5.0	2.0	0.020	0.035	0.058
TLV250L	2.50	5.0	16	100	12.50	5.0	2.2	0.005	0.011	0.020
TLV260	2.60	5.20	16	100	13.00	5.0	2.3	0.015	0.030	0.050
TLV280L	2.80	5.60	16	100	14.00	5.0	2.3	0.004	0.010	0.020
TLV300	3.00	6.30	16	100	15.00	5.0	2.4	0.020	0.031	0.058
TLV310	3.10	6.30	16	100	15.50	5.0	2.4	0.015	0.030	0.058
TLV340	3.40	6.80	16	100	17.00	5.0	2.5	0.015	0.027	0.042
TLV350	3.50	7.00	16	100	17.50	5.0	2.5	0.017	0.025	0.045
TLV350L	3.50	7.00	16	100	17.50	5.0	2.5	0.004	0.010	0.020
TLV380	3.80	7.60	16	100	19.00	5.0	2.5	0.013	0.020	0.033
TLV420	4.20	8.40	16	100	21.00	5.0	2.0	0.012	0.020	0.033
TLV450	4.50	8.9	16	100	22.50	5.0	1.4	0.011	0.018	0.033
TLV550	5.50	10.5	16	100	27.50	5.0	1.4	0.009	0.016	0.031
TLV600	6.00	11.7	16	100	30.00	5.0	2.8	0.007	0.014	0.023
TLV730	7.30	14.1	16	100	36.50	5.0	3.0	0.005	0.010	0.020
TLV900	9.00	18.0	16	100	45.00	5.0	3.2	0.004	0.010	0.020
TLV1000	10.00	20.00	16	100	50.00	5.0	3.4	0.004	0.009	0.018

Product Dimensions & Marking (Unit: mm) (产品尺寸) :



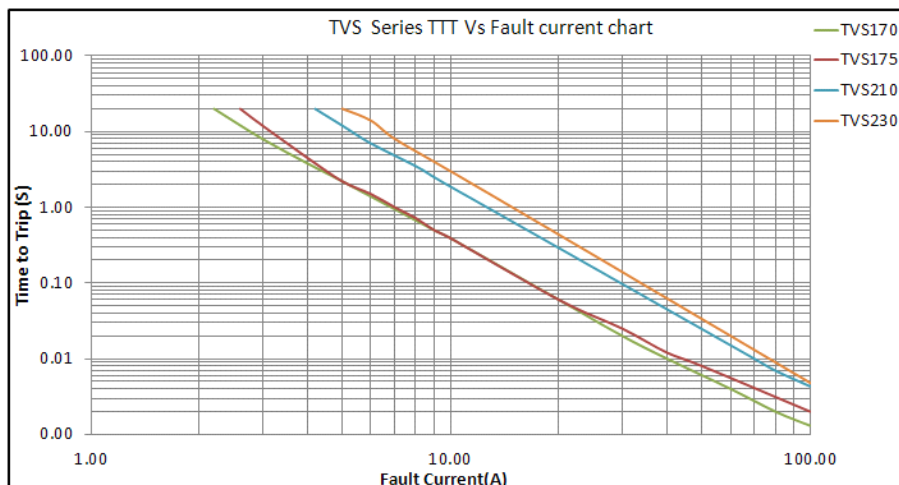
P/N	A		B		C		D		F	
	Min. (最小)	Max. (最大)	Min. (最小)	Max. (最大)	Min. (最小)	Max. (最大)	Min. (最小)	Max. (最大)	Min. (最小)	Max. (最大)
TLS070	17.0	23.1	4.9	5.5	0.6	1.0	3.5	6.0	3.8	4.2
TLS100	17.0	23.1	4.9	5.5	0.6	1.0	3.5	6.0	3.8	4.2
TLS120	17.0	23.1	4.9	5.5	0.6	1.0	3.5	6.0	3.8	4.2
TLS120L	19.9	22.1	4.9	5.2	0.6	1.0	5.5	7.5	3.8	4.1
TLS150	21.3	23.1	4.6	5.5	0.5	1.0	3.5	6.0	3.8	4.2
TLS170	20.9	23.1	4.6	5.5	0.5	1.0	3.5	6.0	3.8	4.2
TLS175	20.9	23.1	4.9	5.2	0.6	1.0	4.1	5.5	3.8	4.1
TLS200	21.3	23.4	10.2	11	0.5	1.1	5	7.6	4.8	5.4
TLS350	28.4	31.8	13	13.5	0.5	1.1	6.3	8.9	6	6.6
TLS420	30.6	32.4	12.9	13.6	0.5	1.1	5	7.5	6	6.6
TVS170	15.4	17.5	6.9	7.4	0.5	1.0	5.0	6.2	3.8	4.2
TVS170N	16	18	4.9	5.5	0.6	0.9	4.1	5.8	3.9	4.1
TVS175	21.9	24.5	3.0	3.6	0.5	1.0	4.5	5.5	2.4	2.6
TVS175N	16	18	4.9	5.5	0.6	0.9	4.1	5.8	3.9	4.1
TVS200	21.9	24.5	3.0	3.6	0.5	1.0	4.0	5.5	2.4	2.6
TVS210	21.9	24.5	3.0	4.0	0.5	1.0	4.5	5.5	2.4	2.6
TVS210N	20.9	23.1	4.9	5.5	0.6	0.9	4.1	5.8	3.9	4.1
TVS230	20.9	23.1	4.9	5.5	0.6	0.9	4.1	5.8	3.9	4.1
TLV175	20.9	23.1	4.6	5.5	0.6	1.0	3.5	6.0	3.8	4.2
TLV180	20.9	23.0	4.6	5.5	0.6	1.0	3.5	6.0	3.8	4.2
TLV190	20.9	23.1	4.6	5.5	0.6	1.0	3.5	6.0	3.8	4.2
TLV190L	9.7	10.3	3.0	3.3	0.5	1.0	2.7	3.3	2.2	2.4
TLV200	20.9	23.1	4.6	5.5	0.6	1.0	3.5	6.0	3.8	4.2
TLV210	20.9	23.1	4.6	5.5	0.6	1.0	3.5	6.0	3.8	4.2
TLV250L	9.7	10.3	3.0	3.3	0.5	1.0	2.7	3.3	2.2	2.4
TLV260	20.9	23.1	4.6	5.5	0.6	1.0	3.5	6.0	3.8	4.2
TLV280L	9.7	10.3	3.0	3.3	0.5	1.0	2.7	3.3	2.2	2.4
TLV300	24.0	27.5	6.9	7.5	0.5	1.0	4.0	6.0	4.8	5.2
TLV310	24.0	28.5	6.9	7.5	0.5	1.0	4.0	6.0	4.8	5.2
TLV340	24.0	28.5	6.9	7.5	0.5	1.0	4.0	6.0	4.8	5.2
TLV350	24.0	27.5	6.9	7.5	0.5	1.0	4.0	6.0	4.8	5.2
TLV350L	9.7	10.3	3.0	3.3	0.5	1.0	2.7	3.3	2.2	2.4
TLV380	24.0	27.5	6.9	7.5	0.5	1.0	4.0	6.0	4.8	5.2
TLV420	24.0	28.5	9.8	10.5	0.5	1.0	4.0	6.0	4.8	5.2
TLV450	24.0	28.5	9.8	10.5	0.5	1.0	4.0	6.0	4.8	5.2
TLV550	24.0	28.5	9.8	10.5	0.5	1.0	4.0	6.0	4.8	5.2
TLV600	24	26.5	13.9	14.5	0.6	1.2	4.1	5.5	5.9	6.1
TLV730	27.1	29.1	13.9	14.5	0.6	1.2	4.1	5.5	5.9	6.1
TLV900	45.0	48.0	7.9	8.5	0.6	1.3	4.0	7.0	5.9	6.1
TLV1000	50.0	52.0	7.9	8.5	0.6	1.3	5.0	7.0	5.9	6.1

Thermal Derating Chart – I_{hold} (Amps) (环境温度与工作电流关系特性曲线)

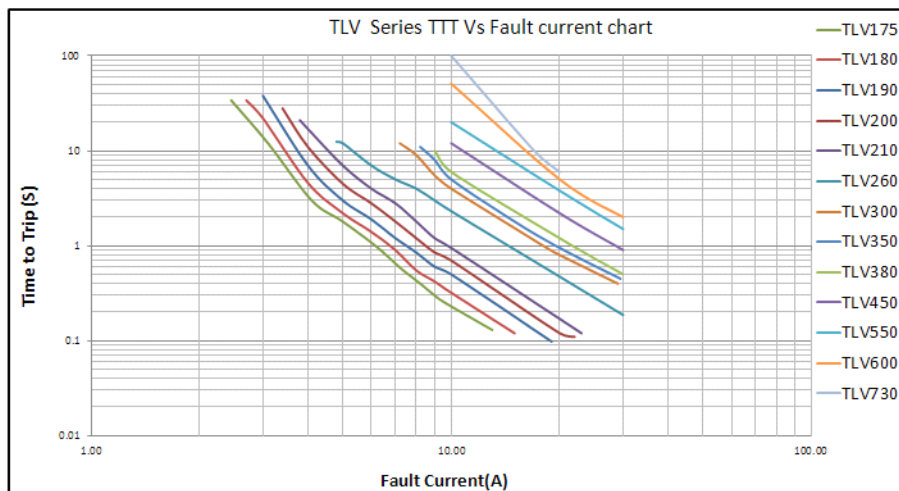
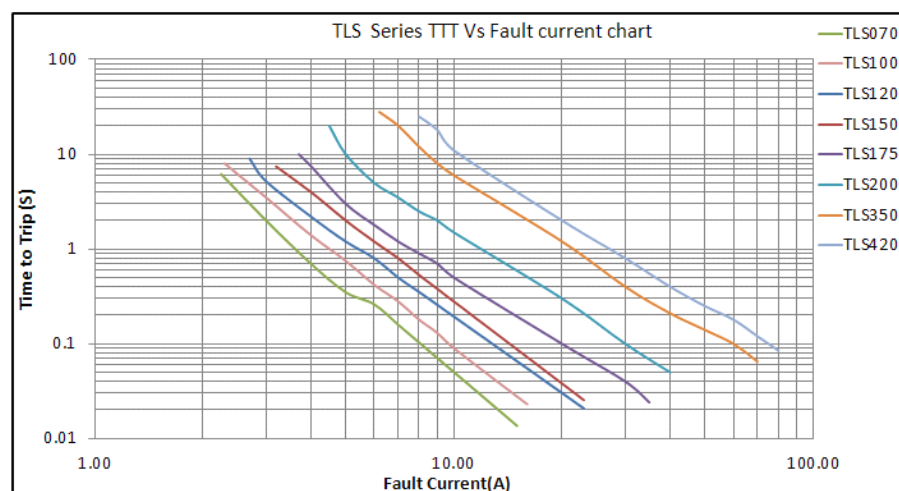
P/N	Ambient Operating Temperature(工作环境温度)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
TLS070	1.11	0.99	0.88	0.70	0.58	0.53	0.47	0.41	0.29
TLS100	1.58	1.42	1.25	1.00	0.83	0.75	0.67	0.58	0.42
TLS120	1.90	1.70	1.50	1.20	1.00	0.90	0.80	0.70	0.50
TLS120L	1.90	1.70	1.50	1.20	1.00	0.90	0.80	0.70	0.50
TLS150	2.20	2.00	1.80	1.50	1.30	1.10	1.00	0.90	0.70
TLS170	2.50	2.30	2.00	1.70	1.50	1.30	1.20	1.10	0.90
TLS175	2.50	2.30	2.00	1.75	1.50	1.30	1.20	1.10	0.90
TLS200	3.20	2.80	2.50	2.00	1.70	1.60	1.40	1.20	0.90
TLS350	5.40	4.80	4.30	3.50	3.00	2.80	2.50	2.20	1.70
TLS420	6.40	5.70	5.10	4.20	3.60	3.30	3.00	2.60	2.10
TVS170	2.69	2.41	2.13	1.70	1.42	1.28	1.13	0.99	0.71
TVS170N	2.69	2.41	2.13	1.70	1.42	1.28	1.13	0.99	0.71
TVS175	2.77	2.48	2.19	1.75	1.46	1.32	1.16	1.02	0.73
TVS175N	2.77	2.48	2.19	1.75	1.46	1.32	1.16	1.02	0.73
TVS200	3.15	2.83	2.50	2.00	1.70	1.53	1.36	1.18	0.85
TVS210	3.32	2.98	2.63	2.10	1.75	1.58	1.40	1.22	0.88
TVS210N	3.32	2.98	2.63	2.10	1.75	1.58	1.40	1.22	0.88
TVS230	3.64	3.26	2.88	2.30	1.92	1.73	1.53	1.34	0.96
TLV175	2.58	2.30	2.12	1.75	1.47	1.38	1.29	1.11	0.92
TLV180	2.65	2.37	2.18	1.80	1.52	1.42	1.33	1.14	0.95
TLV190	2.80	2.50	2.30	1.90	1.60	1.50	1.40	1.20	1.00
TLV190L	3.20	2.80	2.40	1.90	1.60	1.40	1.20	1.00	0.80
TLV200	2.92	2.62	2.38	2.00	1.69	1.54	1.46	1.31	1.08
TLV210	3.09	2.76	2.54	2.10	1.77	1.66	1.55	1.33	1.11
TLV250L	4.20	3.70	3.20	2.50	2.10	1.80	1.50	1.30	1.00
TLV260	3.83	3.42	3.15	2.60	2.19	2.05	1.92	1.64	1.37
TLV280L	4.70	4.10	3.50	2.80	2.30	2.00	1.70	1.40	1.10
TLV300	4.42	3.95	3.63	3.00	2.53	2.37	2.21	1.89	1.58
TLV310	4.63	4.05	3.71	3.10	2.65	2.42	2.23	1.92	1.61
TLV340	4.95	4.42	4.05	3.40	3.04	2.81	2.67	2.37	1.97
TLV350	5.12	4.58	4.17	3.50	2.96	2.69	2.56	2.28	1.88
TLV350L	5.90	5.20	4.40	3.50	2.80	2.40	2.10	1.70	1.30
TLV380	5.50	4.90	4.40	3.80	3.30	3.00	2.80	2.50	2.10
TLV420	6.00	5.45	4.85	4.20	3.60	3.30	3.05	2.70	2.30
TLV450	6.50	5.80	5.30	4.50	3.90	3.60	3.30	2.90	2.50
TLV550	8.00	7.10	6.20	5.50	4.70	4.30	4.00	3.60	3.00
TLV600	8.70	7.80	7.10	6.00	5.20	4.70	4.40	3.90	3.30
TLV730	10.59	9.49	8.64	7.30	6.33	5.72	5.35	4.75	4.02
TLV900	13.03	11.62	10.11	9.00	7.63	6.83	6.48	5.89	4.82
TLV1000	15.64	13.94	12.13	10.00	9.15	8.20	7.78	7.07	5.78



Typical time to trip at 25℃ (25℃下的动作保护时间曲线表):



◆ 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 (安规认证):

- Agency Approvals: UL、CSA、TUV
- Regulation/Standard: RoHS 2.0(2011/65/CE)

Package information (包装信息):

Model	Bulk(-0) package	Q'ty/bag
TLS070 ~ TLS420		500 pcs
TLV190 ~ TLV730		500 pcs
TVS170 ~ TVS230		500 pcs