

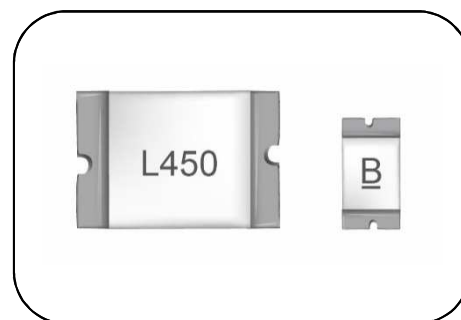
PPTC- Polymer PTC Resettable Fuse: KML Series

SMD Low Resistance Type



■ Features

1. RoHS & Halogen-Free (HF) compliant
2. EIA size: 0603, 0805, 1206, 1210, 1812
3. Hold current ratings from 0.5A to 7.5A
4. Vmax: 6V-12V
5. Small footprint
6. Ultra low resistance
7. Fast time to trip
8. Operating & storage temperature range: -40°C ~+85°C
9. Agency Approval: UL / cUL / TUV



■ Recommended Applications

1. USB, HDMI, IEEE 1394 interface
2. PC, Motherboard, NB, Tablet
3. Protection for lithium ion battery of cell phone
4. Digital cameras
5. Telecommunication
6. Consumer device

■ Part Number Code

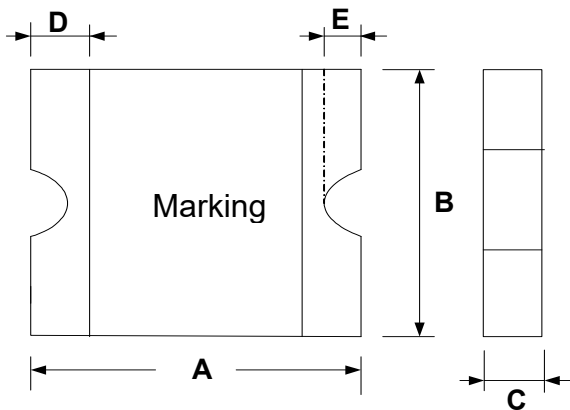
K		M		L		3		S		1		7		5		R		Y							
1		2		3		4		5		6		7		8		9		10		11		12		13	
Product Code KTHINKING Polymer PTC Resettable Fuse		Type MLSMD Low Resistance Type		Dimension 1S0603 2S0805 3S1206 4S1210 5S1812		I hold 0750.75A 1001.0A 4004.0A 7507.5A		Packing RTape & Reel		Optional Suffix YROHS & HF Compliant															

PPTC- Polymer PTC Resettable Fuse: KML Series

SMD Low Resistance Type



■ Structure & Dimensions



(Unit: mm)

Part No.		A		B		C		D		E	
		(Min.)	(Max.)	(Min.)	(Max.)	(Min.)	(Max.)	(Min.)	(Max.)	(Min.)	(Max.)
KML1S050	KML1S050-8	1.40	1.80	0.60	1.00	0.3	0.65	0.125	0.50	0.05	0.40
KML1S075	KML1S075-8					0.3	0.65				
KML1S100	KML1S100-8					0.3	0.65				
KML1S150	KML1S150-8					0.5	0.8				
KML1S175	KML1S175-8					0.5	0.8				
KML1S200						0.5	0.8				
KML2S075	KML2S075-12	2.00	2.20	1.20	1.50	0.4	0.7	0.150	0.55	0.05	0.45
KML2S110	KML2S110-12					0.4	0.7				
KML2S150	KML2S150-12					0.5	0.88				
KML2S175	KML2S175-12					0.5	0.88				
KML2S200						0.5	0.88				
KML2S260						0.5	0.88				
KML2S300						0.5	1.2				
KML2S350						0.6	1.2				
KML2S400						0.6	1.2				
KML3S075	KML3S075-12	3.00	3.50	1.50	1.80	0.4	0.7	0.125	0.75	0.08	0.45
KML3S110	KML3S110-12					0.4	0.7				
KML3S150	KML3S150-12					0.4	0.7				
KML3S175	KML3S175-12					0.6	1.2				
KML3S200	KML3S200-12					0.6	1.2				
KML3S260	KML3S260-12					0.6	1.2				
KML3S300	KML3S300-12					0.6	1.2				
KML3S350	KML3S350-12					0.6	1.2				
KML3S380	KML3S380-12					0.6	1.2				

PPTC- Polymer PTC Resettable Fuse: KML Series

SMD Low Resistance Type



■ Structure & Dimensions

(Unit: mm)

Part No.		A		B		C		D		E	
		(Min.)	(Max.)	(Min.)	(Max.)	(Min.)	(Max.)	(Min.)	(Max.)	(Min.)	(Max.)
KML3S400	KML3S400-12	3.00	3.50	1.50	1.80	0.6	1.2	0.125	0.75	0.08	0.45
KML3S450	KML3S450-12					0.6	1.2				
KML3S500	KML3S500-12					0.6	1.2				
KML3S550						0.6	1.2				
KML3S600						0.6	1.2				
KML4S175	KML4S175-12	3.00	3.43	2.35	2.80	0.4	0.7	0.125	0.75	0.08	0.50
KML4S200	KML4S200-12					0.4	0.7				
KML4S260	KML4S260-12					0.4	0.7				
KML4S300	KML4S300-12					0.6	1.2				
KML4S350	KML4S350-12					0.6	1.2				
KML4S380	KML4S380-12					0.6	1.2				
KML4S400	KML4S400-12					0.6	1.2				
KML4S450	KML4S450-12					0.6	1.2				
KML4S500	KML4S500-12					0.6	1.2				
KML4S550						0.6	1.2				
KML4S600						0.6	1.2				
KML4S650						0.6	1.2				
KML4S700						0.6	1.2				
KML4S750						0.8	1.4				
KML5S190	KML5S190-12	4.37	4.73	3.07	3.41	0.4	0.7	0.20	1.20	0.15	0.65
KML5S260	KML5S260-12					0.4	0.7				
KML5S270	KML5S270-12					0.4	0.7				
KML5S300	KML5S300-12					0.4	0.7				
KML5S350	KML5S350-12					0.4	0.7				
KML5S370	KML5S370-12					0.4	0.7				
KML5S400	KML5S400-12					0.4	0.7				
KML5S450	KML5S450-12					0.6	1.2				
KML5S500	KML5S500-12					0.6	1.2				
KML5S550						0.6	1.2				
KML5S600						0.6	1.2				
KML5S650						0.6	1.2				
KML5S700						0.6	1.2				
KML5S750						0.8	1.4				

PPTC- Polymer PTC Resettable Fuse: KML Series



SMD Low Resistance Type

Electrical Characteristics at 23°C

Part No.	Marking	Vmax.	I _{max} .	I _{hold}	I _{trip}	P _d (Max.)	Maximum Time to Trip		Resistance		Safety Approvals	
		(V _{dc})	(A)	(A)	(A)	(W)	Current (A)	Time (Sec.)	Initial R _i	Post Trip R ₁	UL/cUL	TUV
									Min.(Ω)	Max.(Ω)		
KML1S050	a	6	50	0.5	1	0.6	8	0.1	0.07	0.35	✓	✓
KML1S050-8	a	8	50	0.5	1	0.6	8	0.1	0.07	0.35	✓	-
KML1S075	b	6	50	0.75	1.5	0.6	8	0.2	0.05	0.25	✓	✓
KML1S075-8	b	8	50	0.75	1.5	0.6	8	0.2	0.05	0.25	✓	-
KML1S100	c	6	50	1	1.8	0.6	8	0.3	0.04	0.12	✓	✓
KML1S100-8	c	8	50	1	1.8	0.6	8	0.3	0.04	0.12	✓	-
KML1S150	d	6	50	1.5	3	1	8	0.5	0.007	0.08	✓	✓
KML1S150-8	d	8	50	1.5	3	1	8	0.5	0.007	0.08	✓	-
KML1S175	e	6	50	1.75	3.5	1	8	0.6	0.005	0.06	✓	✓
KML1S175-8	e	8	50	1.75	3.5	1	8	0.6	0.005	0.06	✓	-
KML1S200	f	6	50	2	4	1	8	1	0.003	0.045	✓	✓
KML2S075	<u>A</u>	6	50	0.75	1.5	0.6	8	0.2	0.040	0.160	✓	✓
KML2S075-12	<u>A</u>	12	50	0.75	1.5	1.2	8	0.2	0.040	0.160	✓	✓
KML2S110	<u>B</u>	6	50	1.1	1.8	0.6	8	0.3	0.030	0.130	✓	✓
KML2S110-12	<u>B</u>	12	50	1.1	1.8	1.2	8	0.3	0.030	0.130	✓	✓
KML2S150	<u>C</u>	6	50	1.5	3.0	0.6	8	0.5	0.015	0.065	✓	✓
KML2S150-12	<u>C</u>	12	50	1.5	3.0	1.2	8	0.5	0.015	0.065	✓	✓
KML2S175	<u>D</u>	6	50	1.75	3.5	0.6	8	0.6	0.005	0.055	✓	✓
KML2S175-12	<u>D</u>	12	50	1.75	3.5	1.2	8	0.6	0.005	0.055	✓	✓
KML2S200	E	6	50	2	4	1	8	1	0.005	0.045	✓	✓
KML2S260	F	6	50	2.6	5	1	8	4	0.003	0.035	✓	✓
KML2S300	K	6	50	3	6	1	8	5	0.003	0.03	✓	✓
KML2S350	L	6	50	3.5	7	1.2	8	6	0.002	0.02	✓	✓
KML2S400	N	6	50	4	9	1.2	20	2	0.001	0.016	✓	✓
KML3S075	La	6	50	0.75	1.5	0.8	8	0.3	0.017	0.18	✓	✓
KML3S075-12	La	12	50	0.75	1.5	1.2	8	0.3	0.017	0.18	✓	✓
KML3S110	Lb	6	50	1.1	2.2	0.8	8	0.3	0.015	0.13	✓	✓
KML3S110-12	Lb	12	50	1.1	2.2	1.2	8	0.3	0.015	0.13	✓	✓
KML3S150	Lc	6	50	1.5	3	0.8	8	0.3	0.010	0.08	✓	✓
KML3S150-12	Lc	12	50	1.5	3	1.2	8	0.3	0.010	0.08	✓	✓
KML3S175	L3	6	50	1.75	3.5	0.8	8	0.4	0.005	0.045	✓	✓
KML3S175-12	L3	12	50	1.75	3.5	1.2	8	0.4	0.005	0.045	-	-
KML3S200	L7	6	50	2	4	0.8	8	0.5	0.005	0.04	✓	✓
KML3S200-12	L7	12	50	2	4	1.2	8	0.5	0.005	0.04	✓	✓

Note: UL&cUL File No: E138827 / TUV File No:R50311748

PPTC- Polymer PTC Resettable Fuse: KML Series



SMD Low Resistance Type

■ Electrical Characteristics at 23°C

Part No.	Marking	Vmax.	I _{max} .	I _{hold}	I _{trip}	Pd (Max.)	Maximum Time to Trip		Resistance		Safety Approvals	
		(V _{dc})	(A)	(A)	(A)	(W)	Current (A)	Time (Sec.)	Initial Ri	Post Trip R1	UL/cUL	TUV
									Min.(Ω)	Max.(Ω)		
KML3S260	L8	6	50	2.6	5	0.8	8	4	0.003	0.03	√	√
KML3S260-12	L8	12	50	2.6	5	1.2	8	4	0.003	0.03	√	√
KML3S300	L9	6	50	3	6	0.8	8	4	0.003	0.026	√	√
KML3S300-12	L9	12	50	3	6	1.5	8	4	0.003	0.026	√	√
KML3S350	L1	6	50	3.5	7	0.8	8	5	0.003	0.018	√	√
KML3S350-12	L1	12	50	3.5	7	1.5	8	5	0.003	0.018	√	-
KML3S380	L2	6	50	3.8	8	0.8	8	5	0.002	0.014	√	√
KML3S380-12	L2	12	50	3.8	8	1.5	8	5	0.002	0.014	√	-
KML3S400	L5	6	50	4	8	0.8	20	2	0.001	0.014	√	√
KML3S400-12	L5	12	50	4	8	1.5	20	2	0.001	0.014	√	-
KML3S450	L6	6	50	4.5	9	0.8	22	2	0.001	0.014	√	√
KML3S450-12	L6	12	50	4.5	9	1.5	22	2	0.001	0.014	√	-
KML3S500	Le	6	50	5	10	0.8	25	2	0.001	0.013	√	√
KML3S500-12	Le	12	50	5	10	1.5	25	2	0.001	0.013	√	-
KML3S550	Lf	6	50	5.5	11	0.8	27.5	2	0.001	0.013	√	√
KML3S600	Lg	6	50	6	12	0.8	30	2	0.001	0.012	√	√
KML4S175	LA	6	50	1.75	3.5	0.8	8.0	2.5	0.006	0.040	√	√
KML4S175-12	LA	12	50	1.75	3.5	1.2	8.0	2.5	0.006	0.040	√	√
KML4S200	LB	6	50	2	4	0.8	8.0	3	0.005	0.024	√	√
KML4S200-12	LB	12	50	2	4	1.2	8.0	3	0.005	0.024	√	√
KML4S260	LE	6	50	2.6	5	0.8	8.0	4	0.003	0.02	√	√
KML4S260-12	LE	12	50	2.6	5	1.2	8.0	4	0.003	0.02	√	√
KML4S300	LG	6	50	3	6	0.8	15.0	2	0.003	0.02	√	√
KML4S300-12	LG	12	50	3	6	1.5	15.0	2	0.003	0.02	√	√
KML4S350	LN	6	50	3.5	7	0.8	17.5	2	0.003	0.018	√	√
KML4S350-12	LN	12	50	3.5	7	1.5	17.5	2	0.003	0.018	√	√
KML4S380	LK	6	50	3.8	8	0.8	19.0	2	0.003	0.016	√	√
KML4S380-12	LK	12	50	3.8	8	1.5	19.0	2	0.003	0.016	√	√
KML4S400	LM	6	50	4	8	0.8	20.0	2	0.002	0.014	√	√
KML4S400-12	LM	12	50	4	8	1.5	20.0	2	0.002	0.014	-	-
KML4S450	LP	6	50	4.5	9	0.8	22.5	2	0.002	0.014	√	√
KML4S450-12	LP	12	50	4.5	9	1.5	22.5	2	0.002	0.014	-	-

Note: UL&cUL File No.: E138827 / TUV File No.: 50311748

PPTC- Polymer PTC Resettable Fuse: KML Series



SMD Low Resistance Type

■ Electrical Characteristics at 23°C

Part No.	Marking	Vmax.	I _{max} .	I _{hold}	I _{trip}	P _d (Max.)	Maximum Time to Trip		Resistance		Safety Approvals	
		(V _{dc})	(A)	(A)	(A)	(W)	Current (A)	Time (Sec.)	Initial R _i	Post Trip R ₁	UL/cUL	TUV
									Min.(Ω)	Max.(Ω)		
KML4S500	LQ	6	50	5	10	0.8	25	2	0.002	0.012	✓	✓
KML4S500-12	LQ	12	50	5	10	1.5	25	2	0.002	0.012	-	-
KML4S550	LR	6	50	5.5	11	0.8	27.5	2	0.002	0.011	✓	✓
KML4S600	LS	6	50	6	12	0.8	30	2	0.001	0.01	✓	✓
KML4S650	LV	6	50	6.5	13	0.8	32.5	2	0.001	0.009	✓	✓
KML4S700	LX	6	50	7	14	1	35	2	0.001	0.008	✓	✓
KML4S750	LY	6	50	7.5	15	1	37.5	2	0.001	0.007	✓	✓
KML5S190	L190	6	50	1.9	4.9	1	9.5	4.5	0.003	0.025	✓	✓
KML5S190-12	L190	12	50	1.9	4.9	1.5	9.5	4.5	0.003	0.025	✓	✓
KML5S260	L260	6	50	2.6	6	1	13	2	0.003	0.024	✓	✓
KML5S260-12	L260	12	50	2.6	6	1.5	13	2	0.003	0.024	-	-
KML5S270	L270	6	50	2.7	6.2	1	13	2	0.003	0.023	✓	✓
KML5S270-12	L270	12	50	2.7	6.2	1.5	13	2	0.003	0.023	✓	✓
KML5S300	L300	6	50	3	6.2	1	8	5	0.003	0.021	✓	✓
KML5S300-12	L300	12	50	3	6.2	2	8	5	0.003	0.021	✓	✓
KML5S350	L350	6	50	3.5	8.1	1	8	5	0.003	0.02	✓	✓
KML5S350-12	L350	12	50	3.5	8.1	2	8	5	0.003	0.02	✓	✓
KML5S370	L370	6	50	3.7	9.1	1	18.5	2	0.003	0.018	✓	✓
KML5S370-12	L370	12	50	3.7	9.1	2	18.5	2	0.003	0.018	✓	✓
KML5S400	L400	6	50	4	8	1	20.0	2	0.003	0.017	✓	✓
KML5S400-12	L400	12	50	4	8	2	20.0	2	0.003	0.017	✓	-
KML5S450	L450	6	50	4.5	9	1	22.5	2	0.001	0.014	✓	✓
KML5S450-12	L450	12	50	4.5	9	2	22.5	2	0.001	0.014	✓	-
KML5S500	L500	6	50	5	10	1	25	2	0.001	0.013	✓	✓
KML5S500-12	L500	12	50	5	10	2	25	2	0.001	0.013	✓	-
KML5S550	L550	6	50	5.5	11	1	27.5	2	0.001	0.008	✓	✓
KML5S600	L600	6	50	6	12	1	30	2	0.001	0.008	✓	✓
KML5S650	L650	6	50	6.5	13	1	32.5	2	0.001	0.008	✓	✓
KML5S700	L700	6	50	7	14	1	35	2	0.001	0.007	✓	✓
KML5S750	L750	6	50	7.5	15	1	37.5	2	0.001	0.006	✓	✓

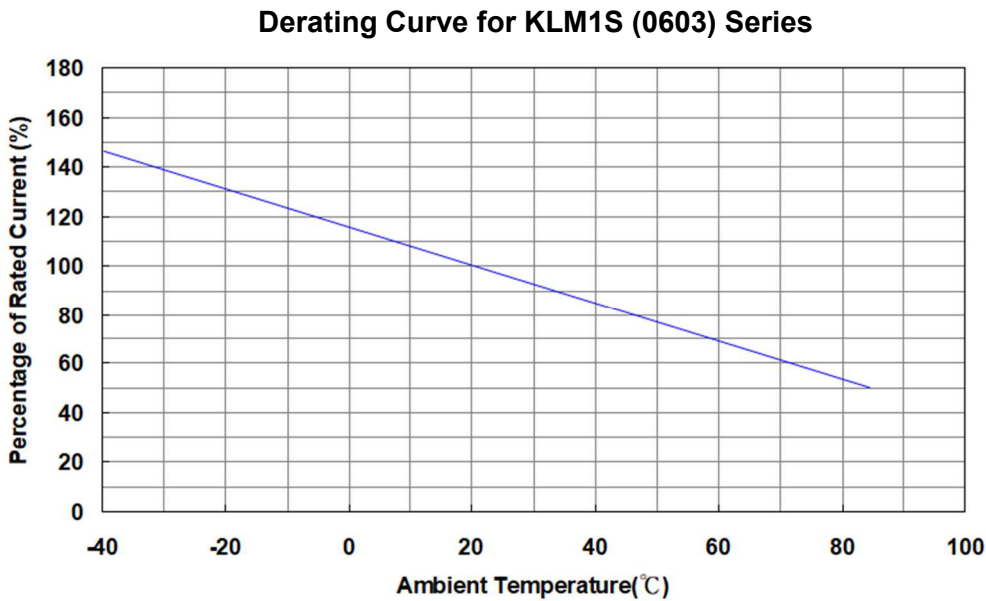
Note: UL&cUL File No.: E138827 / TUV File No.: R50311748

PPTC- Polymer PTC Resettable Fuse: KML Series

SMD Low Resistance Type



■ KML1S (0603) Series Ihold & Itrip Thermal Derating Curve



■ KML1S (0603) Series Ihold Thermal Derating Chart

KML1S (0603) Series

(Unit: A)

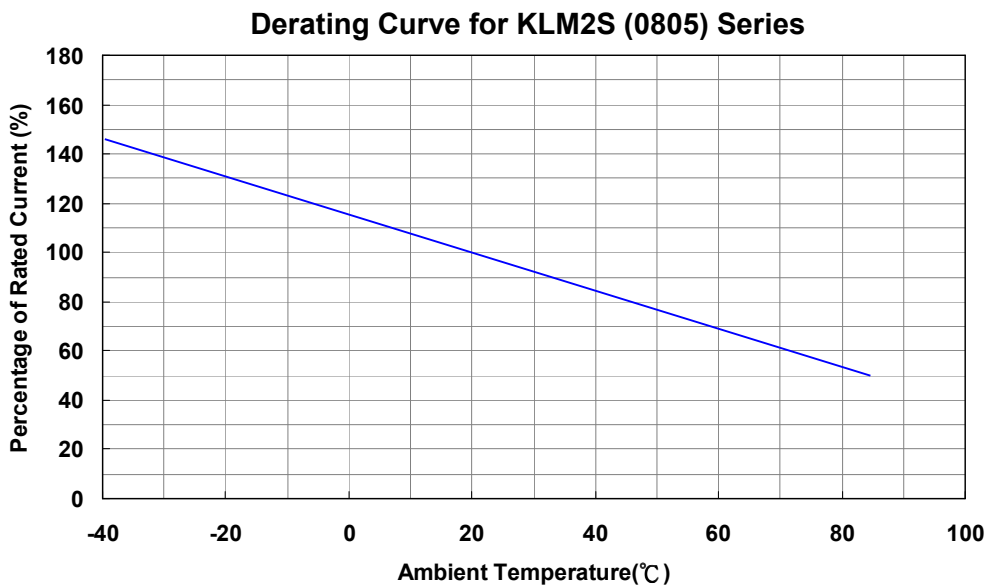
Part No.		Ambient Operation Temperature							
		-40°C	-20°C	0°C	23°C	40°C	60°C	70°C	85°C
KML1S050	KML1S050-8	0.81	0.71	0.62	0.50	0.42	0.30	0.24	0.16
KML1S075	KML1S075-8	1.24	1.07	0.94	0.75	0.62	0.47	0.37	0.21
KML1S100	KML1S100-8	1.36	1.25	1.10	1.00	0.83	0.65	0.52	0.33
KML1S150	KML1S150-8	2.37	2.07	1.80	1.50	1.25	0.93	0.74	0.50
KML1S175	KML1S175-8	2.57	2.23	1.99	1.75	1.49	1.24	1.00	0.80
KML1S200		2.80	2.60	2.30	2.00	1.70	1.45	1.15	1.05

PPTC- Polymer PTC Resettable Fuse: KML Series

SMD Low Resistance Type



■ KML2S (0805) Series Ihold & Itrip Thermal Derating Curve



■ KML2S (0805) Series Ihold Thermal Derating Chart

KML2S (0805) Series

(Unit: A)

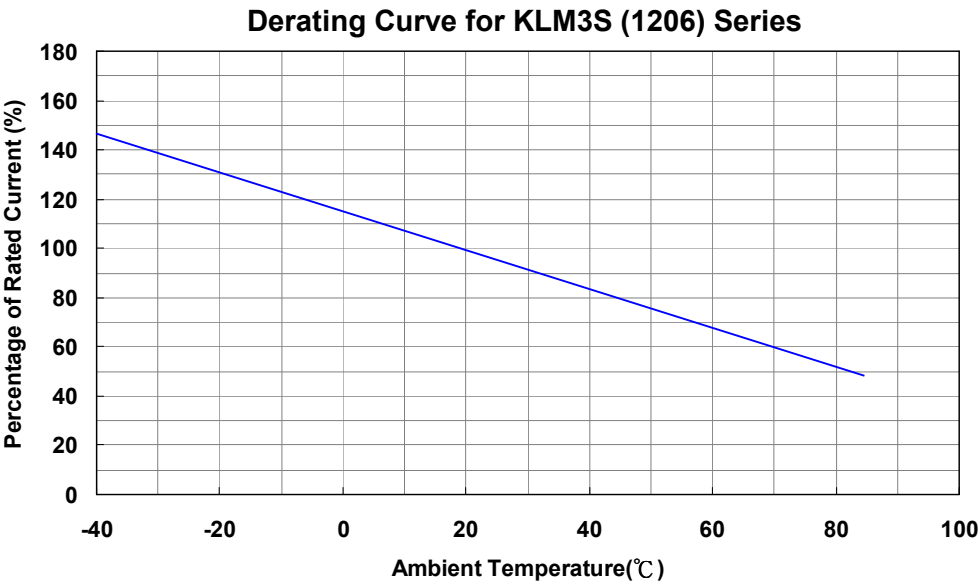
Part No.		Ambient Operation Temperature							
		-40°C	-20°C	0°C	23°C	40°C	60°C	70°C	85°C
KML2S075	KML2S075-12	1.24	1.07	0.94	0.75	0.62	0.47	0.37	0.21
KML2S110	KML2S110-12	1.93	1.65	1.38	1.10	0.83	0.55	0.41	0.23
KML2S150	KML2S150-12	2.37	2.07	1.80	1.50	1.25	0.93	0.74	0.50
KML2S175	KML2S175-12	2.57	2.33	2.07	1.75	1.49	1.24	1.00	0.91
KML2S200		3.10	2.75	2.40	2.00	1.65	1.15	0.95	0.65
KML2S260		3.80	3.30	2.80	2.60	2.20	1.78	1.55	1.05
KML2S300		4.55	4.15	3.65	3.00	2.55	2.00	1.65	1.20
KML2S350		5.6	4.38	3.81	3.5	2.74	2.28	1.93	1.37
KML2S400		6.4	5	4.35	4	3.13	2.6	2.2	1.57

PPTC- Polymer PTC Resettable Fuse: KML Series

SMD Low Resistance Type



■ KML3S (1206) Series Ihold & Itrip Thermal Derating Curve



■ KML3S (1206) Series Ihold Thermal Derating Chart

KML3S (1206) Series

(Unit: A)

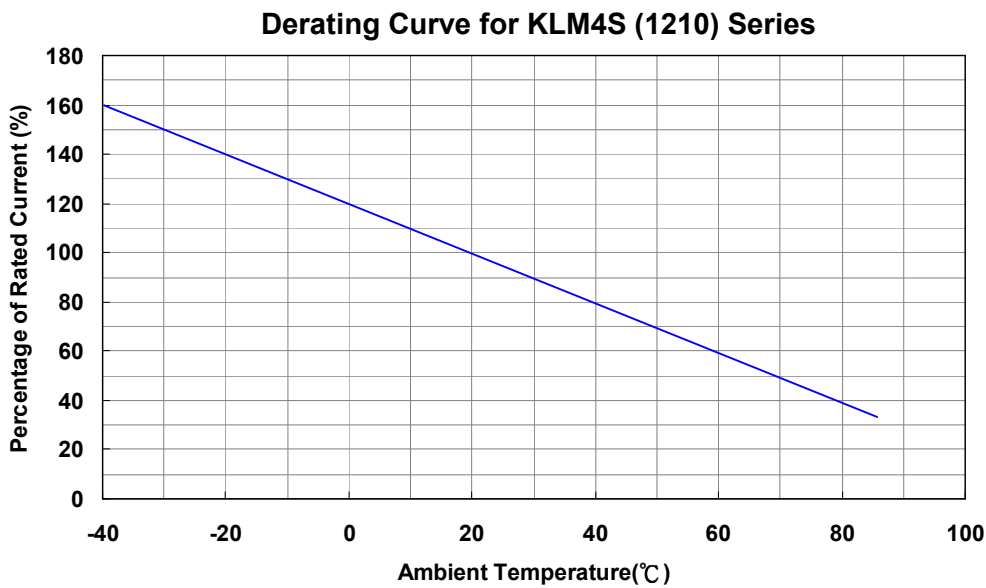
Part no		Ambient Operation Temperature							
		-40°C	-20°C	0°C	23°C	40°C	60°C	70°C	85°C
KML3S075	KML3S075-12	1.10	1.00	0.89	0.75	0.64	0.53	0.43	0.39
KML3S110	KML3S110-12	1.62	1.46	1.30	1.10	0.94	0.78	0.63	0.57
KML3S150	KML3S150-12	2.21	2.00	1.77	1.50	1.28	1.07	0.86	0.78
KML3S175	KML3S175-12	2.57	2.33	2.07	1.75	1.49	1.16	0.90	0.80
KML3S200	KML3S200-12	3.30	2.90	2.50	2.00	1.62	1.24	1.00	0.85
KML3S260	KML3S260-12	3.71	3.42	3.01	2.60	2.08	1.49	1.30	0.89
KML3S300	KML3S300-12	4.41	3.99	3.54	3.00	2.55	2.13	1.71	1.56
KML3S350	KML3S350-12	5.15	4.66	4.13	3.50	2.98	2.49	2.00	1.82
KML3S380	KML3S380-12	5.59	5.05	4.48	3.80	3.20	2.29	2.05	1.98
KML3S400	KML3S400-12	5.71	5.26	4.63	4.00	3.30	2.60	2.16	2.05
KML3S450	KML3S450-12	6.62	5.99	5.31	4.50	3.83	3.20	2.57	2.10
KML3S500	KML3S500-12	7.20	6.60	5.80	5.00	4.25	3.40	3.00	2.34
KML3S550		8.00	7.15	6.35	5.50	4.90	4.10	3.70	3.05
KML3S600		8.65	7.80	7.00	6.00	5.30	4.50	4.05	3.40

PPTC- Polymer PTC Resettable Fuse: KML Series

SMD Low Resistance Type



■ KML4S (1210) Series Ihold & Itrip Thermal Derating Curve



■ KML4S (1210) Series Ihold Thermal Derating Chart

KML4S (1210) Series

(Unit: A)

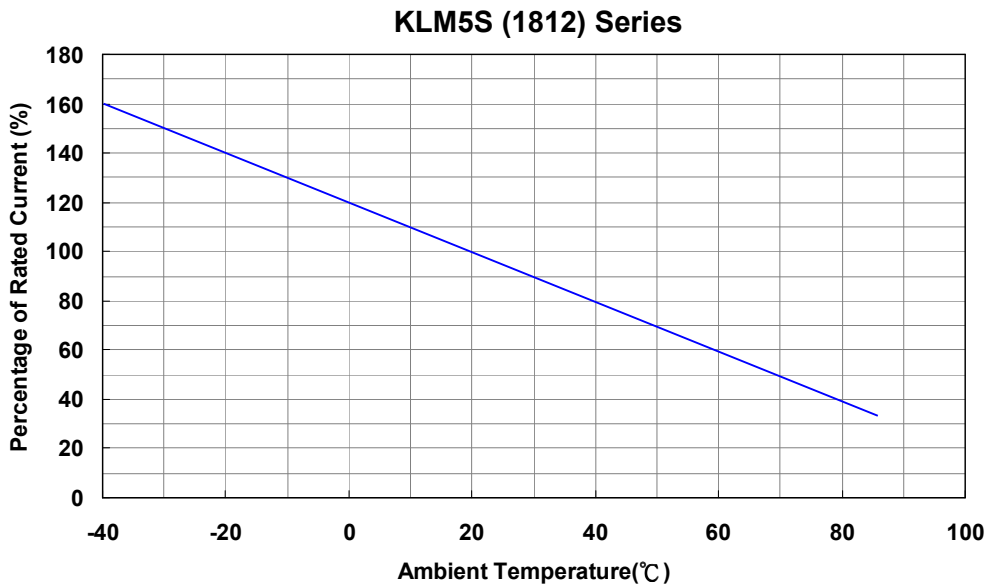
Part no		Ambient Operation Temperature							
		-40°C	-20°C	0°C	23°C	40°C	60°C	70°C	85°C
KML4S175	KML4S175-12	2.57	2.33	2.07	1.75	1.49	1.24	1.00	0.78
KML4S200	KML4S200-12	3.26	2.87	2.50	2.00	1.70	1.29	1.09	0.91
KML4S260	KML4S260-12	3.82	3.46	3.07	2.60	2.21	1.85	1.48	1.35
KML4S300	KML4S300-12	4.41	3.99	3.54	3.00	2.55	2.00	1.71	1.40
KML4S350	KML4S350-12	5.00	4.60	4.05	3.50	2.80	2.13	1.60	1.50
KML4S380	KML4S380-12	5.71	5.26	4.52	3.80	3.15	2.29	2.00	1.60
KML4S400	KML4S400-12	6.00	5.28	4.63	4.00	3.20	2.39	2.09	1.73
KML4S450	KML4S450-12	6.62	5.99	5.31	4.50	3.83	3.20	2.57	2.34
KML4S500	KML4S500-12	7.30	6.60	5.65	5.00	4.27	3.50	3.00	2.55
KML4S550		8.00	7.15	6.35	5.50	4.90	4.10	3.70	3.05
KML4S600		8.65	7.80	7.00	6.00	5.30	4.50	4.05	3.40
KML4S650		9.15	8.15	7.40	6.50	5.50	4.90	3.60	2.70
KML4S700		9.85	8.80	7.95	7.00	5.95	5.30	3.90	2.90
KML4S750		10.25	9.15	8.45	7.50	6.75	6.15	4.70	3.65

PPTC- Polymer PTC Resettable Fuse: KML Series

SMD Low Resistance Type



■ KML5S (1812)Series Ihold & Itrip Thermal Derating Curve



■ KML5S (1812) Series Ihold Thermal Derating Chart

KML5S (1812) Series

(Unit: A)

Part no		Ambient Operation Temperature							
		-40°C	-20°C	0°C	23°C	40°C	60°C	70°C	85°C
KML5S190	KML5S190-12	3.00	2.58	2.22	1.90	1.49	1.14	0.93	0.61
KML5S260	KML5S260-12	3.82	3.46	3.07	2.60	2.16	1.54	1.48	0.93
KML5S270	KML5S270-12	3.86	3.55	3.12	2.70	2.21	1.85	1.35	1.03
KML5S300	KML5S300-12	4.41	3.99	3.54	3.00	2.55	2.10	1.71	1.12
KML5S350	KML5S350-12	5.43	4.73	4.13	3.50	2.80	2.13	1.75	1.56
KML5S370	KML5S370-12	5.44	4.92	4.37	3.70	3.15	2.63	2.11	1.92
KML5S400	KML5S400-12	5.88	5.28	4.64	4.00	3.41	2.84	2.55	2.08
KML5S450	KML5S450-12	6.62	5.99	5.31	4.50	3.83	3.20	2.57	2.34
KML5S500	KML5S500-12	7.35	6.60	5.85	5.00	4.31	3.55	3.15	2.55
KML5S550		8.12	7.32	6.40	5.50	4.85	3.88	3.40	2.55
KML5S600		8.88	8.00	6.99	6.00	5.15	5.00	3.45	2.60
KML5S650		9.65	8.66	7.58	6.50	5.55	4.50	3.65	2.75
KML5S700		10.62	9.30	8.15	7.00	5.98	5.05	3.95	3.00
KML5S750		11.35	9.95	8.70	7.50	6.75	5.75	4.95	3.55

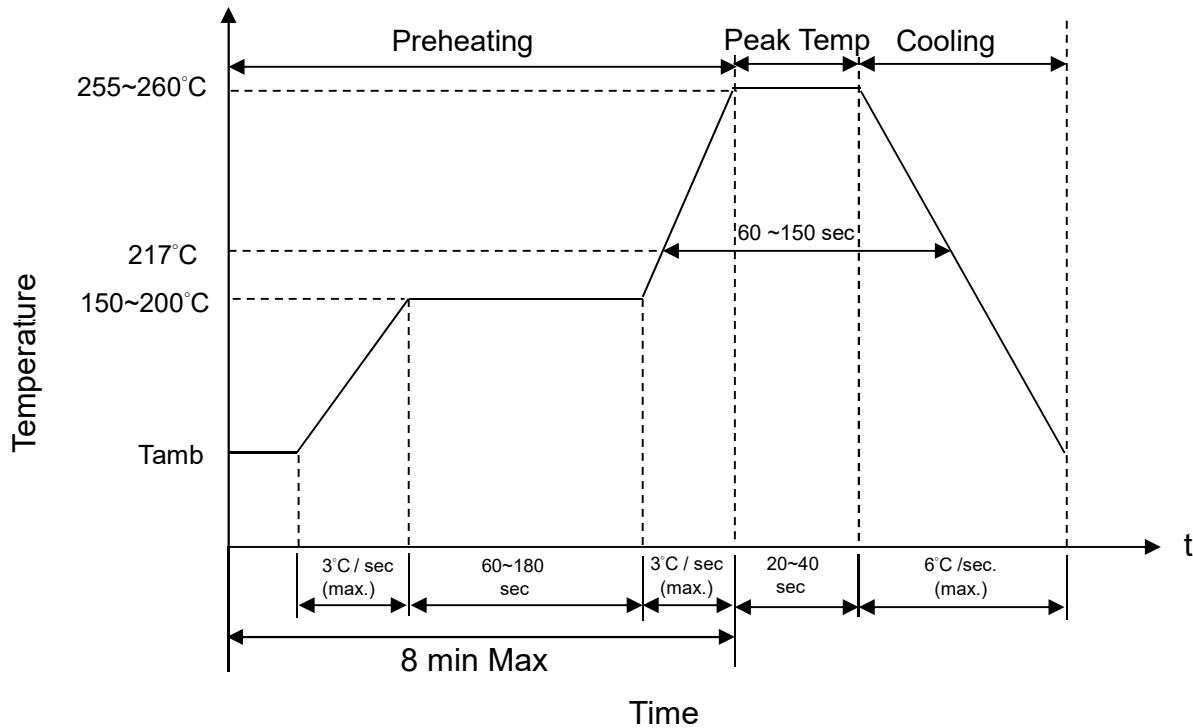
PPTC- Polymer PTC Resettable Fuse: KML Series

SMD Low Resistance Type



■ Recommended Soldering Condition

● IR-Reflow Soldering Profile



- Welding method of the product is reflow welding, and wave soldering is not recommended.
- Recommended reflow methods: IR, vapor phase, and hot air oven.
- Devices can be cleaned by using standard industry methods and solvents.

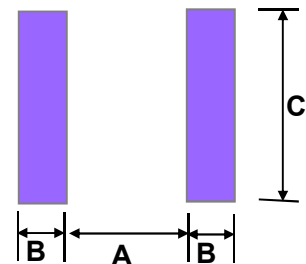
Note:

- If reflow temperature exceeds the recommended profile, devices may not meet the performance requirements.
- Devices are not designed to be wave soldered to the bottom side of the board.

■ Recommended Soldering Pad Dimensions (Nominal)

(Unit: mm)

Series	Size	A	B	C
KML1S	0603	0.8	1.00	1.00
KML2S	0805	1.20	1.00	1.50
KML3S	1206	2.00	1.00	1.90
KML4S	1210	2.00	1.00	2.80
KML5S	1812	3.45	1.78	3.50

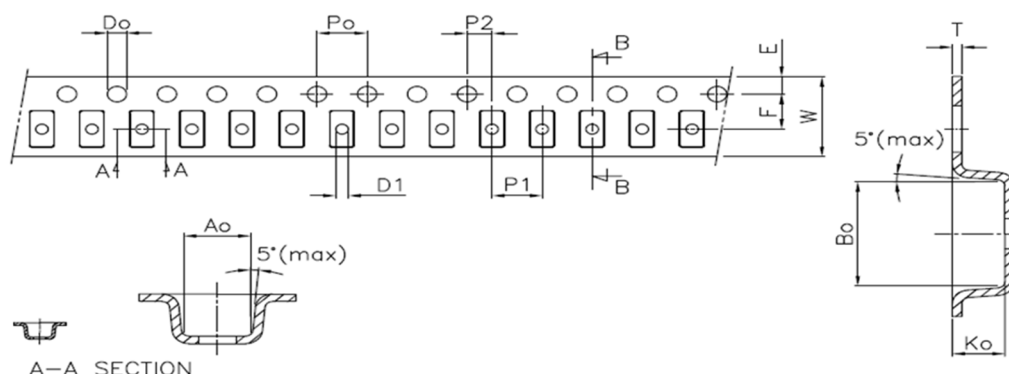


■ Reliability

Item	Standard	Test Condition / Methods	Criteria
Passive Aging	IEC 60738-1	85±5°C, 1000±24hrs	±10% typical resistance change
Humidity Aging	Specification Standard	85±5°C, 80~85%RH, 100±5hrs	±15% typical resistance change
Rapid Change of Temperature	IEC 60738-1	85±5/-40±5°C, 20 cycles Duration:30min	-30% typical resistance change
Overload and Endurance Test	UL 1434	Vmax, 120% Imax, 50 cycles Vmax, 300% Itrip, 6000 cycles	No visible damage
Aging Test	UL 1434	Vmax, Itrip≤I _{max} , 1000±24hrs	No visible damage
Solderability	IEC 60068-2-58	245 ± 5°C, 3 ± 0.3sec	At least 95% of terminal electrode is covered by new solder.
Resistance to Soldering Heat	IEC 60068-2-58	260 ± 5°C, 10 ± 1sec	Rf<R1, No visible damage

■ Package

● Taping Specification



◆ KML1S Series: SMD 0603 Type

For KML1S050 ~ KML1S100

(Unit: mm)

Index Size	A ₀ ±0.05	B ₀ ±0.05	K ₀ ±0.05	P ₀ ±0.10	P ₁ ±0.10	P ₂ ±0.05	T ±0.05	E ±0.10	F ±0.05	D ₀ +0.10/ -0	D ₁ +0.10/ -0.05	W +0.30 -0.10	10P ₀ ±0.20
0603	1.1	1.85	0.60	4.0	4.0	2.0	0.20	1.75	3.5	1.5	0.5	8.0	40.0

For KML1S150 ~ KML1S200

(Unit: mm)

Index Size	A ₀ ±0.05	B ₀ ±0.05	K ₀ ±0.05	P ₀ ±0.10	P ₁ ±0.10	P ₂ ±0.05	T ±0.05	E ±0.10	F ±0.05	D ₀ ±0.05	D ₁ +0.10/ -0	W ±0.10	10P ₀ ±0.20
0603	1.1	1.95	0.85	4.0	4.0	2.0	0.2	1.75	3.5	1.55	0.5	8.0	40.0

PPTC- Polymer PTC Resettable Fuse: KML Series

SMD Low Resistance Type



◆ KML2S Series: SMD 0805 Type

(Unit: mm)

Index Size	A ₀	B ₀	K ₀	P ₀	P ₁	P ₂	T	E	F	D ₀	D ₁	W	10P ₀
	±0.10	±0.10	±0.050	±0.08	±0.10	±0.05	±0.10	±0.10	±0.05	±0.05	Min.	±0.10	±0.20
0805	1.6	2.3	0.9	4.0	4.0	2.0	0.25	1.75	3.50	1.55	1.0	8.0	40.0

◆ KML3S Series: SMD 1206 Type

For KML3S075~KML3S150

(Unit:mm)

Index Size	A ₀	B ₀	K ₀	P ₀	P ₁	P ₂	T	E	F	D ₀	D ₁	W	10P ₀
	±0.10	±0.10	±0.05	±0.10	±0.10	±0.10	±0.05	±0.10	±0.10	±0.05	Min.	±0.30	±0.20
1206	1.85	3.45	0.85	4.0	4.0	2.0	0.23	1.75	3.5	1.55	1.0	8.0	40.0

For KML3S175~ KML3S600

(Unit: mm)

Index Size	A ₀	B ₀	K ₀	P ₀	P ₁	P ₂	T	E	F	D ₀	D ₁	W	10P ₀
	±0.10	±0.10	±0.05	±0.10	±0.10	±0.10	±0.05	±0.10	±0.10	±0.05	Min.	±0.30	±0.20
1206	1.95	3.55	1.4	4.0	4.0	2.0	0.23	1.75	3.5	1.55	1.0	8.0	40.0

◆ KML4S Series: SMD 1210 Type

(Unit: mm)

Index Size	A ₀	B ₀	K ₀	P ₀	P ₁	P ₂	T	E	F	D ₀	D ₁	W	10P ₀
	±0.10	±0.10	±0.05	±0.10	±0.10	±0.10	±0.05	±0.10	±0.10	±0.05	Min.	±0.30	±0.20
1210	2.82	3.63	1.47	4.0	4.0	2.0	0.23	1.75	3.5	1.55	1.0	8.0	40.0

◆ KML5S Series: SMD 1812 Type

For KML5S190~ KML5S400

(Unit: mm)

Index Size	A ₀	B ₀	K ₀	P ₀	P ₁	P ₂	T	E	F	D ₀	D ₁	W	10P ₀
	±0.10	±0.10	±0.05	±0.10	±0.10	±0.10	±0.03	±0.10	±0.10	±0.05	Min.	±0.30	±0.20
1812	3.50	5.0	0.9	4.0	8.0	2.0	0.25	1.75	5.5	1.55	1.50	12.0	40.0

For KML5S450~ KML5S750

(Unit: mm)

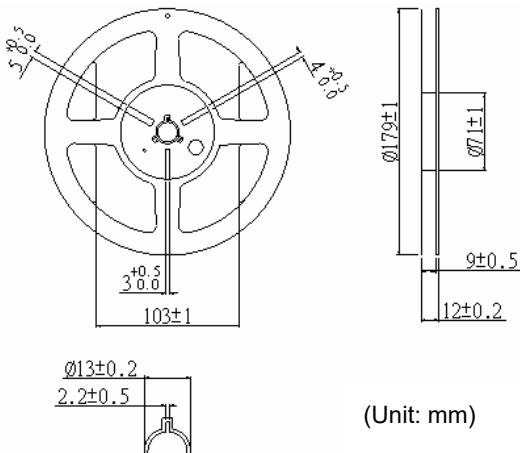
Index Size	A ₀	B ₀	K ₀	P ₀	P ₁	P ₂	T	E	F	D ₀	D ₁	W	10P ₀
	±0.10	±0.10	±0.05	±0.10	±0.10	±0.10	±0.05	±0.10	±0.10	±0.05	Min.	±0.30	±0.20
1812	3.56	4.94	1.7	4.0	8.0	2.0	0.25	1.75	5.5	1.55	1.50	12.0	40.0

PPTC- Polymer PTC Resettable Fuse: KML Series

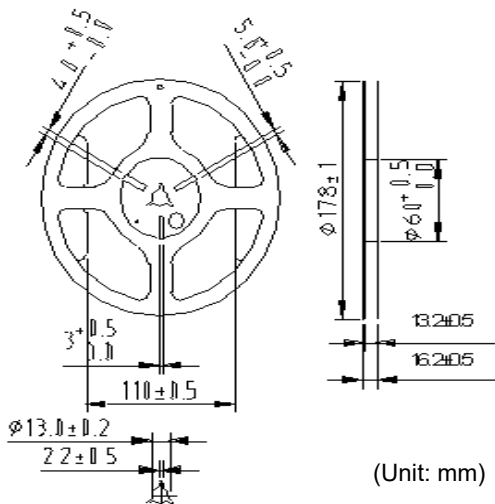
SMD Low Resistance Type



Quantity



Size	Part No.	Quantity (pcs/reel)	Carton Size (mm)	Quantity (reel/carton)
0603	KML1S050~100	6,000	350*350*290	28
	KML1S150~200	5,000		
0805	KML2S	4,000		
1206	KML3S075~150	5,000		
	KML3S175~600	2,500		
1210	KML4S	3,000		



Size	Part no	Quantity (pcs/reel)	Carton Size (mm)	Quantity (reel/carton)
1812	KML5S190~400	2,000	350*350*290	24
	KML5S450~750	1,000		

Warehouse Storage Conditions of Products

- Storage Conditions:
 1. Storage Temperature: $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$
 2. Relative humidity: $\leq 75\%\text{RH}$
 3. Thermistors must be kept away from sunlight and stored in a non-corrosive atmosphere.
- Period of Storage: 1 year