

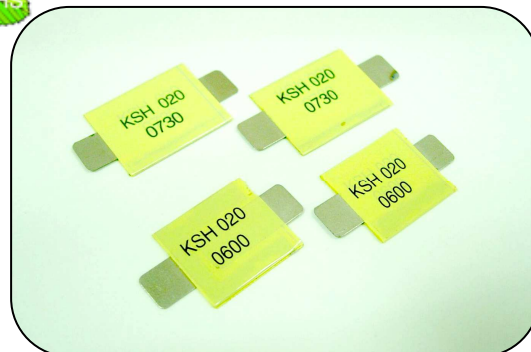
Polymer PTC Resettable Fuse: KSH Series

Strap Type KSH Series



■ Features

1. RoHS compliant
2. Broadest range of resettable devices available in the industry
3. Current ratings from 1.7 to 14.1A
4. Maximum voltage : 15V , 20V
5. Operating temperature range : -40 ~ +85°C
6. Agency Recognition :UL /cUL/TUV



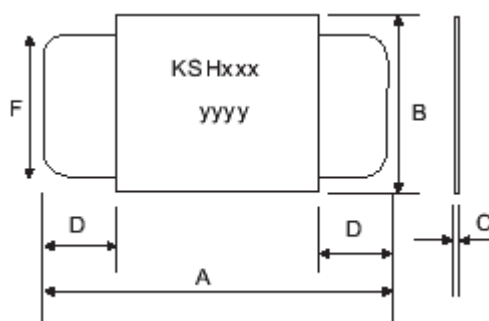
■ Recommended Applications

1. Rechargeable battery packs

■ Part No. Code

K		S		H		0		1		5		0		1		7		0		N		B		Y							
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16	
Product code		Form factor		Usage		Vmax. operation		I hold		Shape of lead		Packaging		Internal Control Code																	
K	Thinking PPTC thermistor	S	Strap	M	Metal hydride device	015	15V	0008	0.08A	S	Slitted lead on single side	B	Bulk	Y	ROHS Control																
				L	Lithium ion device	020	20V	0090	0.9A	D	Slitted lead on dual side	R	Taping & Reel																		
				V	Very low temp. device			0014	0.14A	N	Noslitted lead																				
				H	High power device			0135	1.35A																						
								0170	1.7A																						
								0600	6A																						
								1000	10A																						
								1200	12A																						

■ Dimensions



Marking: xxx=Vmax. operation, yyyy=I hold

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(Unit:mm)

Part no.	A		B		C		D		F	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
KSH0150170	19.0	21.0	3.8	4.0	0.5	0.9	5.3	6.5	2.9	3.1
KSH0150190	19.9	22.1	4.9	5.5	0.6	1.0	5.5	7.5	3.9	4.1
KSH0150260	20.9	23.1	4.9	5.5	0.6	1.0	4.1	5.5	3.9	4.1
KSH0150310	26.8	28.2	6.9	7.1	0.6	1.0	2.5	12.0	4.9	5.1
KSH0150380	24.0	26.0	6.9	7.5	0.6	1.0	4.1	5.5	4.9	5.1
KSH0200450	24.0	26.0	9.9	10.5	0.6	1.0	5.3	6.7	5.9	6.6
KSH0200550	35.0	37.0	6.9	7.5	0.6	1.0	5.3	6.7	4.9	5.1
KSH0200600	24.0	26.0	13.9	14.5	0.6	1.0	4.1	5.5	5.9	6.6
KSH0200730	27.1	29.1	13.9	14.5	0.6	1.0	4.1	5.5	5.9	6.6
KSH0200880	62.8	65.2	7.9	8.5	0.6	1.0	10.0	12.0	5.9	6.1
KSH0200900	45.4	47.6	7.9	8.5	0.9	1.3	4.6	6.2	5.9	6.1
KSH0201300	61.5	66.5	9.4	10.0	0.9	1.3	5.0	7.5	5.9	6.1
KSH0201410	58.0	60.0	13.4	14.0	0.9	1.3	4.2	5.8	5.9	6.1

■ Characteristics(23°C)

Part no	Vmax.	Imax.	Ihold @ 23°C	Itrip @ 23°C	Pd (Typ.)	Maximum time to trip		Resistance (Ω)			Safety approvals	
								Initial (Ri)		Post trip (R1)		
	(V _{dc})	(A)	(A)	(A)	(W)	(A)	(Sec.)	Max.	Max.	Max.	UL/cUL	TUV
KSH0150170	15	100	1.70	3.40	0.8	8.5	5.0	0.044	0.078	0.114		
KSH0150190	15	100	1.90	3.90	0.8	9.50	5.0	0.039	0.072	0.102	√	√
KSH0150260	15	100	2.60	5.80	1.0	13.00	5.0	0.020	0.042	0.063	√	√
KSH0150310	15	100	3.10	6.50	1.2	15.5	4.5	0.017	0.031	0.056	√	√
KSH0150380	15	100	3.80	8.30	1.2	19.00	5.0	0.013	0.026	0.037	√	√
KSH0200450	20	100	4.50	8.90	1.4	22.50	5.0	0.011	0.020	0.028	√	√
KSH0200550	20	100	5.50	10.5	2.0	27.50	5.0	0.009	0.016	0.022	√	√
KSH0200600	20	100	6.00	11.7	1.7	30.00	5.0	0.007	0.014	0.019	√	√
KSH0200730	20	100	7.30	14.1	1.9	30.00	5.0	0.006	0.012	0.015	√	√
KSH0200880	20	100	8.80	16.0	2.0	44.0	5.0	0.007	0.0105	0.015		
KSH0200900	20	100	9.00	16.7	3.0	45.0	5.0	0.006	0.010	0.014		
KSH0201300	20	100	13.0	21.2	2.2	50.0	10.0	0.004	0.007	0.009		
KSH0201410	20	100	14.1	26.2	2.2	70.0	5.0	0.003	0.005	0.007		

Note : UL&cUL File No. E138827

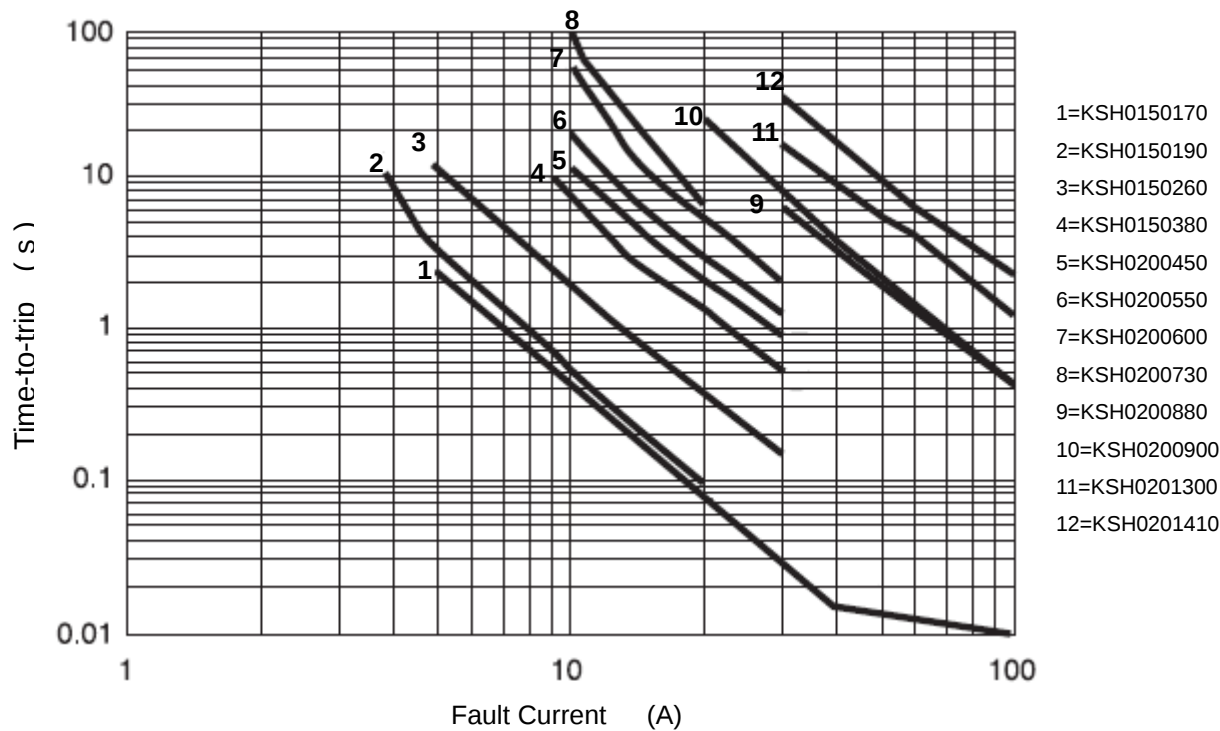
TUV File No. R50066599

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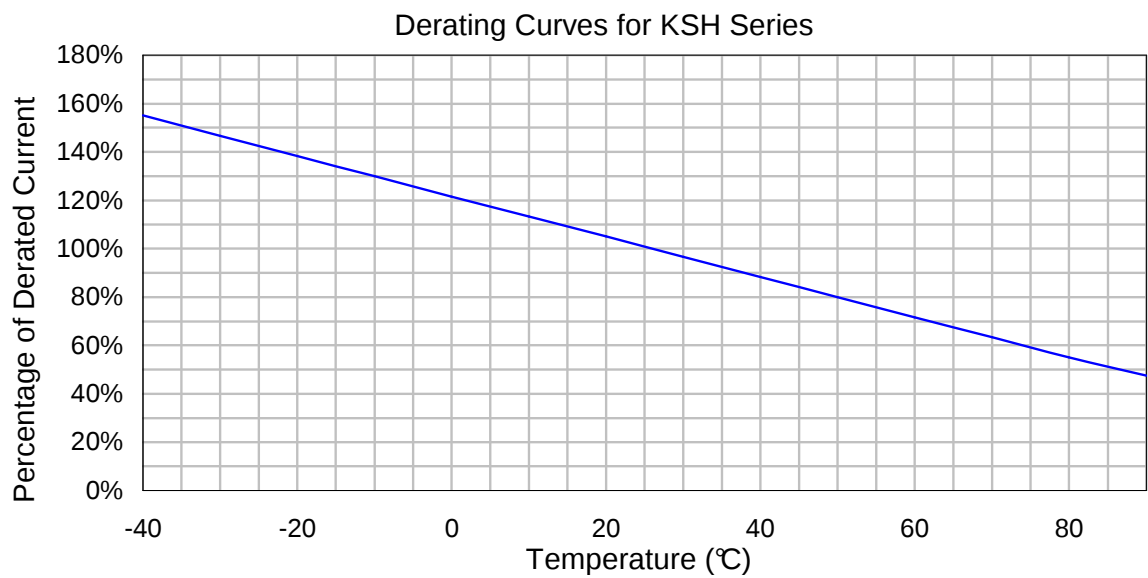
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■ Typical time to trip curve at 23°C



■ Thermal derating curve



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■ Reliability test

Item	Test condition/methods	Criteria
Passive aging	70°C , 1000hrs	±10% typical resistance change
Humidity storage	40°C , 95%RH, 1344hrs Mil-Std 202, method 103 condition D	±5% typical resistance change
Cycle life	50 cycles at a 120% maximum current (Imax) and maximum voltage (Vmax). UL 1434	Normal Appearance
Trip endurance	Vmax, Imax, 48Hrs	Normal Appearance
Steady-state operating life	Vmax, Iss, 1000hrs Mil-Std 750, method 1026	Normal Appearance

■ Packaging

Bulk packing

Series	Quantity PCS/Bag
KSH (0170~0260)	1000
KSH (0310~1410)	500

Ammo packing

Series	Quantity PCS/Box
KSH (0170~0260)	10000
KSH (0310~1410)	5000

Carton packing

Series	Quantity PCS/Box
KSH (0170~0260)	60000
KSH (0310~1410)	30000

■ Storage condition of products

(I) Storage Conditions :

- 1.Storage Temperature : -10°C ~+40°C
- 2.Relative humidity : ≤ 75%RH
- 3.Thermistors must be kept away from sunlight and stored in a non-corrosive atmosphere.

(II) Period of Storage : 1 year