

PRODUCT DATA



■ Strap Type KSM Series

● Features

1. Broadest range of resettable devices available in the industry
2. Current ratings from 1.2 to 4.2A
3. Maximum voltage is 24V

● Recommended applications

1. Rechargeable battery packs

● Approvals



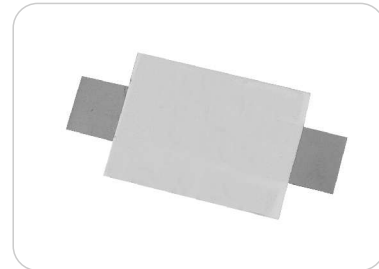
* UL 1434 recognized



* cUL recognized



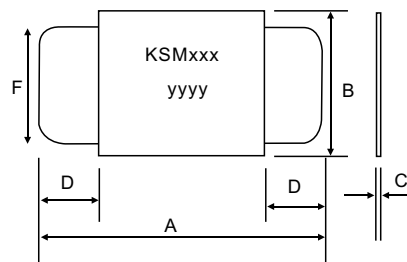
* TUV recognized



● Part number code

K		S		M		0		1		5		0		1		2		0		N		B									
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		Special Spec. Controlling Number															
K	Thinking PPTC thermistor			S	Strap			M	Metal hydride device		016	16V	0008	0.08A	S	Slitted lead on single side		B	Bulk												
				L	Lithium ion device			030	30V	0090	0.9A	D	Slitted lead on dual side		R	Taping & Reel															
				V	Very low temp. device			060	60V	0014	0.14A	N	Noslitted lead																		
				H	High power device			072	72V	0135	1.35A																				
								110	110V	0170	1.7A																				
										0600	6A																				
										1000	10A																				
										1200	12A																				

● Dimensions



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

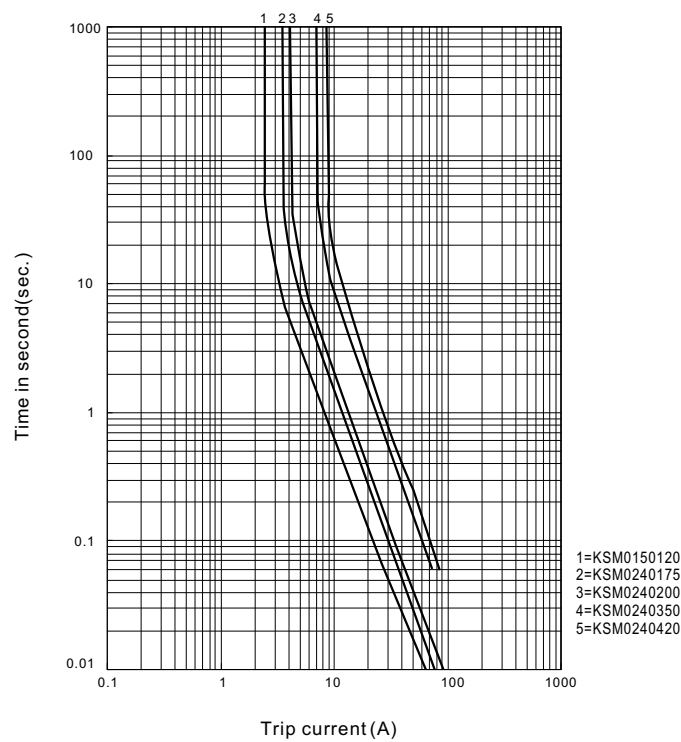
(Unit: mm)

Part no.	A		B		C		D		F	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
KSM0150120	19.9	22.1	4.9	5.2	0.6	1.0	5.5	7.5	3.9	4.1
KSM0150175	20.9	23.1	4.9	5.2	0.6	1.0	4.1	5.5	3.9	4.1
KSM0240200	21.3	23.4	10.2	11.0	0.6	1.0	5.0	7.6	4.8	5.4
KSM0240350	28.4	31.8	13.0	13.5	0.6	1.0	6.3	8.9	6.0	6.6
KSM0240420	30.6	32.4	12.9	13.6	0.6	1.0	5.0	7.5	6.0	6.7

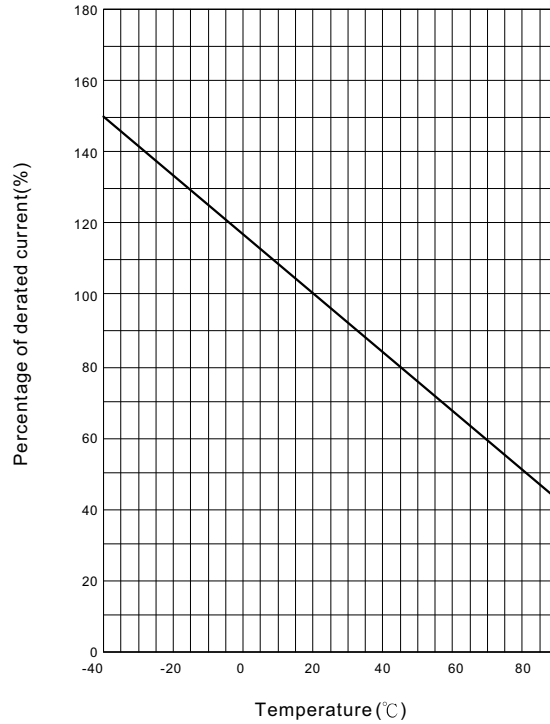
● **Characteristics**

Part no.	Vmax.	Imax.	Ihold @ 23°C	Itrip @ 23°C	Pd (Max.)	Maximum time to trip		Resistance (Ω)		
								Initial (Ri)		Post trip (R1)
	(V _{dc})	(A)	(A)	(A)	(W)	(A)	(Sec.)	Min.	Max.	Max.
KSM0150120	15	100	1.20	2.70	1.20	6.00	5.0	0.085	0.160	0.220
KSM0150175	15	100	1.75	3.80	1.50	9.00	4.0	0.050	0.090	0.120
KSM0240200	24	100	2.00	4.40	1.90	10.00	4.0	0.030	0.060	0.100
KSM0240350	24	100	3.50	6.30	2.50	20.00	3.0	0.017	0.031	0.050
KSM0240420	24	100	4.20	7.60	2.90	20.00	6.0	0.012	0.024	0.040

● **Average time to trip curve**



● Thermal derating curve



● Reliability test

Item	Test condition/methods	Criteria
Passive aging	85°C, 1000hrs	$\Delta R/R_i \leq \pm 5\%$
Humidity storage	40°C, 95%RH, 1344hrs Mil-Std 202, method 103 condition D	$\Delta R/R_i \leq \pm 5\%$
Thermal shock	85/-40°C, 20 cycles	$\Delta R/R_i \leq \pm 10\%$
Cycle life	50 cycles at a 120% maximum current (I_{max}) and maximum voltage (V_{max}). UL 1434	No damage
Trip endurance	V_{max} , I_{max} , 48Hrs	No damage
Steady-state operating life	V_{max} , I_{ss} , 1000hrs Mil-Std 750, method 1026	$\Delta R/R_i \leq \pm 10\%$