

Surface Mount Type

Series: **Medium-size TK** Type: **V**
TK High temperature Lead-Free reflow(suffix:A*)



Features

- Endurance: 2000 h at 125 °C
- Vibration-proof product is available upon request.
- RoHS directive compliant

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-34970699
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Specifications

Category Temp. Range	-40 °C to +125 °C								
Rated W.V. Range	10 V.DC to 100 V.DC								
Nominal Cap. Range	47 μF to 4700 μF								
Capacitance Tolerance	±20 % (120 Hz/+20 °C)								
DC Leakage Current	I ≤ 0.01 CV After 2 minutes								
tan δ	Please see the attached High temperature lead-free reflow products list.								
Characteristics at Low Temperature	W.V. (V)	10	16	25	35	50	63	80	100
	Z(-25 °C)/Z(+20 °C)	3	2	2	2	2	2	2	2
	Z(-40 °C)/Z(+20 °C)	6	4	4	3	3	3	3	3
Endurance	After applying rated working voltage for 2000 hours at +125 °C±2 °C and then being stabilized at +20 °C, Capacitors shall meet the following limits.								
	Capacitance change	±30 % of initial measured value (Miniaturization product : Within ±35 %)							
	tan δ	≤ 300 % of initial specified value (Miniaturization product : Within 350 %)							
	DC leakage current	≤ initial specified value							
Shelf Life	After storage for 1000 hours at +125 °C±2 °C with no voltage applied and then being stabilized at +20 °C, capacitors shall meet the limits specified in Endurance.(With voltage treatment)								
	After reflow soldering and then being stabilized at +20 °C, capacitors shall meet the following limits.								
Resistance to Soldering Heat	Capacitance change	±10 % of initial measured value							
	tan δ	≤ initial specified value							
	DC leakage current	≤ initial specified value							

Marking

Example: 10 V 1000 μF
 Marking color: BLACK

Capacitance (μF)
 Series
 Mark for Lead-Free Products Black Dot (Square)
 Rated Voltage Mark
 Lot number
 Negative polarity marking (-)

A	10 V
C	16 V
E	25 V
V	35 V
H	50 V
J	63 V
K	80 V
2A	100 V

Dimensions in mm (not to scale)

() reference size

Size code	D	L	A, B	H max.	I	W	P	K
H13	12.5	13.5	13.5	15.0	4.7	0.90±0.30	4.4	0.70±0.30
J16	16.0	16.5	17.0	19.0	5.5	1.20±0.30	6.7	0.70±0.30
K16	18.0	16.5	19.0	21.0	6.7	1.20±0.30	6.7	0.70±0.30

(mm)

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

NEW

■ High temperature Lead-Free reflow Products

Endurance : 125 °C 2000 h

W.V.	Cap. (±20 %)	Case size			Specification				Part No. (RoHS:compliant)	Reflow	Min. Packaging Q'ty		
		Dia.	Length	*Size Code	Ripple Current (100 kHz) (+125 °C) (mA r.m.s.)	ESR		tan δ (120 Hz) (+20 °C)			Taping		
						+20 °C	-40 °C					(pcs)	
(V)	1000	12.5	13.5	H13	800	0.120	1.80	0.30	EEETK1A102AQ	(9)	200		
				(H13)								800	0.120
		10	2200	16	16.5	J16	1100	0.080	1.20	0.32	EEETK1A222AM	(9)	125
						(J16)							
				16	16.5	K16	1300	0.075	1.10	0.36	EEETK1A332AM	(9)	125
						(K16)							
16	330	12.5	13.5	H13	800	0.120	1.80	0.23	EEETK1C331AQ	(9)	200		
				(H13)								800	0.120
	470	12.5	13.5	H13	800	0.120	1.80	0.23	EEETK1C681AQ	(9)	200		
				(H13)								800	0.120
	1000	16	16.5	J16	1100	0.080	1.20	0.25	EEETK1C102AM	(9)	125		
				(J16)								1100	0.080
		16	16.5	K16	1300	0.075	1.10	0.27	EEETK1C222AM	(9)	125		
				(K16)								1300	0.075
	25	330	12.5	13.5	H13	800	0.120	1.80	0.18	EEETK1E331AQ	(9)	200	
					(H13)								800
470		12.5	13.5	H13	800	0.120	1.80	0.18	EEETKE681UAQ	(9)	200		
				(H13)								800	0.120
680		16	16.5	J16	1100	0.080	1.20	0.18	EEETKE102UAM	(9)	125		
				(J16)								1100	0.080
		18	16.5	K16	1300	0.075	1.10	0.20	EEETK1E222AM	(9)	125		
35	330	12.5	13.5	H13	800	0.120	1.80	0.16	EEETK1V331AQ	(9)	200		
				(H13)								800	0.120
	470	16	16.5	J16	1100	0.080	1.20	0.16	EEETK1V471AM	(9)	125		
				(J16)								1100	0.080
	680	16	16.5	K16	1300	0.075	1.10	0.16	EEETK1V681AM	(9)	125		
				(K16)								1300	0.075
1000	18	16.5	K16	1300	0.075	1.10	0.16	EEETK1V102AM	(9)	125			
50	220	12.5	13.5	H13	600	0.230	3.40	0.14	EEETK1H221AQ	(10)	200		
				(H13)								600	0.230
	330	12.5	13.5	H13	600	0.230	3.40	0.14	EEETK1H331AQ	(10)	200		
				(H13)								600	0.230
	470	16	16.5	J16	900	0.150	2.20	0.14	EEETK1H471AM	(10)	125		
				(J16)								900	0.150
680	18	16.5	K16	950	0.140	2.10	0.14	EEETK1H681AM	(10)	125			
1000	18	16.5	K16	950	0.140	2.10	0.14	EEETK1H102AM	(10)	125			
63	100	12.5	13.5	H13	350	0.260	5.20	0.12	EEETK1J101AQ	(11)	200		
				(H13)								350	0.260
	220	12.5	13.5	H13	350	0.260	5.20	0.12	EEETK1J221AQ	(11)	200		
				(H13)								350	0.260
330	16	16.5	J16	500	0.180	3.60	0.12	EEETK1J331AM	(11)	125			
470	16	16.5	J16	500	0.180	3.60	0.12	EEETK1J471AM	(11)	125			
80	47	12.5	13.5	H13	250	0.420	8.40	0.12	EEETK1K470AQ	(11)	200		
				(H13)								250	0.420
	100	12.5	13.5	H13	250	0.420	8.40	0.12	EEETKK101UAQ	(11)	200		
				(H13)								250	0.420
	220	16	16.5	J16	350	0.300	6.00	0.12	EEETK1K101AM	(11)	125		
				(J16)								350	0.300
	330	16	16.5	J16	350	0.300	6.00	0.12	EEETKK331UAM	(11)	125		
(J16)				350								0.300	6.00
470	18	16.5	K16	400	0.280	5.60	0.12	EEETK1K471AM	(11)	125			
100	47	12.5	13.5	H13	250	0.420	8.40	0.10	EEETK2A470AQ	(11)	200		
				(H13)								250	0.420
	100	16	16.5	J16	350	0.300	6.00	0.10	EEETK2A101AM	(11)	125		
				(J16)								350	0.300
220	18	16.5	K16	400	0.280	5.60	0.10	EEETK2A221AM	(11)	125			
330	18	16.5	K16	400	0.280	5.60	0.10	EEETK2A331AM	(11)	125			

* Size code():Miniaturization product

The taping dimensions are explained on p.177 of our Catalog. Please use it as a reference guide.

Reflow Profile(Fig-1 to Fig-11) listed on p.175 of our Catalog.

Design and specifications are each subject to change without notice. Ask factory for the current technical specification. Should a safety concern arise regarding this product, please be sure to contact us immediately.

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-34970699
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)