



碩哲科技股份有限公司  
ISO9001 ACROPARTS TECHNOLOGY CO.,LTD.

## SPECIFICATION FOR APPROVAL

CUSTOMER : Schukat electronic Vertriebs  
CUSTOMER P/N :  
ATC P/N : DSKT4532-SERIES  
QUANTITY : 0 PCS  
DATE : 2021.02.09

Please confirm your acceptance of this approval sheet by return fax.

APPROVED

REJECTED



DRAWN BY	CHECKED BY	APPROVED BY
林月霞 <i>Alice</i>	張德名 <i>Richard</i>	葉任銘 <i>J.M.Yeh</i>

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**SPECIFICATION**

ATC's DWG  
NUMBER

**DSKT4532-SERIES**

PROD.  
NAME

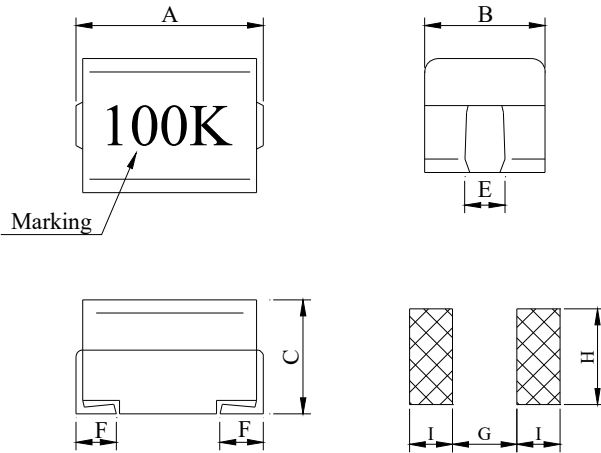
WOUND CHIP INDUCTOR

REV.

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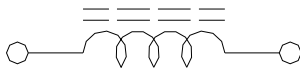
**1 Configuration and Dimensions :**



Item	Spec. (mm)
A	4.50 ± 0.30
B	3.20 ± 0.20
C	3.20 ± 0.20
E	1.20 typ.
F	1.15 ± 0.15
G	2.20 ref.
H	1.60 ref.
I	1.50 ref.

( PCB Pattern )

**2 Schematic Diagram :**



**3 Rating :**

Operating Temperature : -40°C ~ +125°C ( Including self-temperature rise )

Storage Temperature : Under 40°C , Humidity < 75%

**4 Material List :**

- a. Core : Ferrite DR core
- b. Wire : Enamelled copper wire (class H)
- c. Terminal : Cu / Ni / Sn
- d. Encapsulate : Epoxy novolac molding compound



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**5 Electrical Characteristics :**

DWG No.	Inductance (uH)	Q min.	Test Freq. (Hz)	SRF (MHz)typ.	RDC (Ω)max.	IDC (mA)max.	Tol.
DSKT4532-R10□F	0.100	35	25.2M	780.0	0.180	800.0	K,M
DSKT4532-R12□F	0.120	35	25.2M	735.0	0.200	770.0	K,M
DSKT4532-R15□F	0.150	35	25.2M	615.0	0.220	730.0	K,M
DSKT4532-R18□F	0.180	35	25.2M	570.0	0.240	700.0	K,M
DSKT4532-R22□F	0.220	40	25.2M	505.0	0.250	665.0	K,M
DSKT4532-R27□F	0.270	40	25.2M	450.0	0.260	635.0	K,M
DSKT4532-R33□F	0.330	40	25.2M	425.0	0.280	605.0	K,M
DSKT4532-R39□F	0.390	40	25.2M	390.0	0.300	575.0	K,M
DSKT4532-R47□F	0.470	40	25.2M	350.0	0.320	545.0	K,M
DSKT4532-R56□F	0.560	40	25.2M	325.0	0.360	520.0	K,M
DSKT4532-R68□F	0.680	40	25.2M	300.0	0.400	500.0	K,M
DSKT4532-R82□F	0.820	40	25.2M	275.0	0.450	475.0	K,M
DSKT4532-1R0□F	1.000	50	7.96M	250.0	0.500	450.0	J,K,M
DSKT4532-1R2□F	1.200	50	7.96M	240.0	0.550	430.0	J,K,M
DSKT4532-1R5□F	1.500	50	7.96M	210.0	0.600	410.0	J,K,M
DSKT4532-1R8□F	1.800	50	7.96M	190.0	0.650	390.0	J,K,M
DSKT4532-2R2□F	2.200	50	7.96M	160.0	0.700	380.0	J,K,M
DSKT4532-2R7□F	2.700	50	7.96M	150.0	0.750	370.0	J,K,M
DSKT4532-3R3□F	3.300	50	7.96M	110.0	0.800	355.0	J,K,M
DSKT4532-3R9□F	3.900	50	7.96M	100.0	0.900	330.0	J,K,M
DSKT4532-4R7□F	4.700	50	7.96M	80.00	1.000	315.0	J,K,M
DSKT4532-5R6□F	5.600	50	7.96M	50.00	1.100	300.0	J,K,M
DSKT4532-6R8□F	6.800	50	7.96M	35.00	1.200	285.0	J,K,M
DSKT4532-8R2□F	8.200	50	7.96M	28.00	1.400	270.0	J,K,M
DSKT4532-100□F	10.00	50	2.52M	22.00	1.600	250.0	J,K,M
DSKT4532-120□F	12.00	50	2.52M	20.00	2.000	225.0	J,K,M
DSKT4532-150□F	15.00	50	2.52M	18.00	2.500	200.0	J,K,M
DSKT4532-180□F	18.00	50	2.52M	16.00	2.800	190.0	J,K,M
DSKT4532-220□F	22.00	50	2.52M	14.00	3.200	180.0	J,K,M
DSKT4532-270□F	27.00	50	2.52M	13.00	3.600	170.0	J,K,M

Note :

- Tolerance : J=±5% / K=±10% / M=±20%
- IDC base on  $\Delta L / L0A=10\%$



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**5 Electrical Characteristics :**

DWG No.	Inductance (uH)	Q min.	Test Freq. (Hz)	SRF (MHz)typ.	RDC (Ω)max.	IDC (mA)max.	Tol.
DSKT4532-330□F	33.00	50	2.52M	12.00	4.000	160.0	J,K,M
DSKT4532-390□F	39.00	50	2.52M	11.00	4.500	150.0	J,K,M
DSKT4532-470□F	47.00	50	2.52M	10.50	5.000	140.0	J,K,M
DSKT4532-560□F	56.00	50	2.52M	10.00	5.500	135.0	J,K,M
DSKT4532-680□F	68.00	50	2.52M	9.500	6.000	130.0	J,K,M
DSKT4532-820□F	82.00	50	2.52M	8.500	7.000	120.0	J,K,M
DSKT4532-101□F	100.0	40	0.796M	8.000	8.000	110.0	J,K,M
DSKT4532-121□F	120.0	40	0.796M	7.000	8.000	110.0	J,K,M
DSKT4532-151□F	150.0	40	0.796M	6.000	9.000	105.0	J,K,M
DSKT4532-181□F	180.0	40	0.796M	5.500	9.500	102.0	J,K,M
DSKT4532-221□F	220.0	40	0.796M	5.000	10.00	100.0	J,K,M
DSKT4532-271□F	270.0	40	0.796M	4.500	12.00	92.00	J,K,M
DSKT4532-331□F	330.0	40	0.796M	4.000	14.00	85.00	J,K,M
DSKT4532-391□F	390.0	40	0.796M	3.500	18.00	80.00	J,K,M
DSKT4532-471□F	470.0	40	0.796M	3.500	26.00	62.00	J,K,M
DSKT4532-561□F	560.0	30	0.796M	3.000	30.00	50.00	J,K,M
DSKT4532-681□F	680.0	30	0.796M	3.000	30.00	50.00	J,K,M
DSKT4532-821□F	820.0	30	0.796M	2.500	35.00	30.00	J,K,M
DSKT4532-102□F	1000	20	0.252M	2.500	40.00	30.00	J,K,M

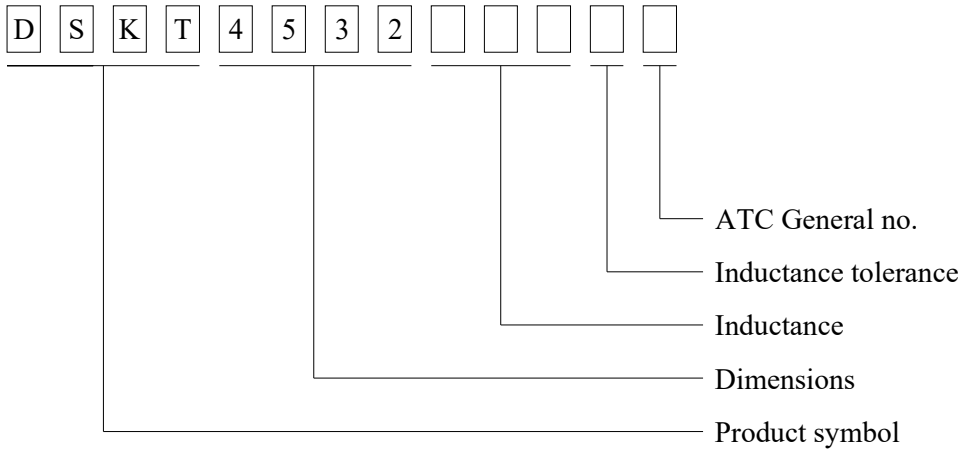
Note :

- Tolerance : J=±5% / K=±10% / M=±20%
- IDC base on  $\Delta L / L0A=10\%$



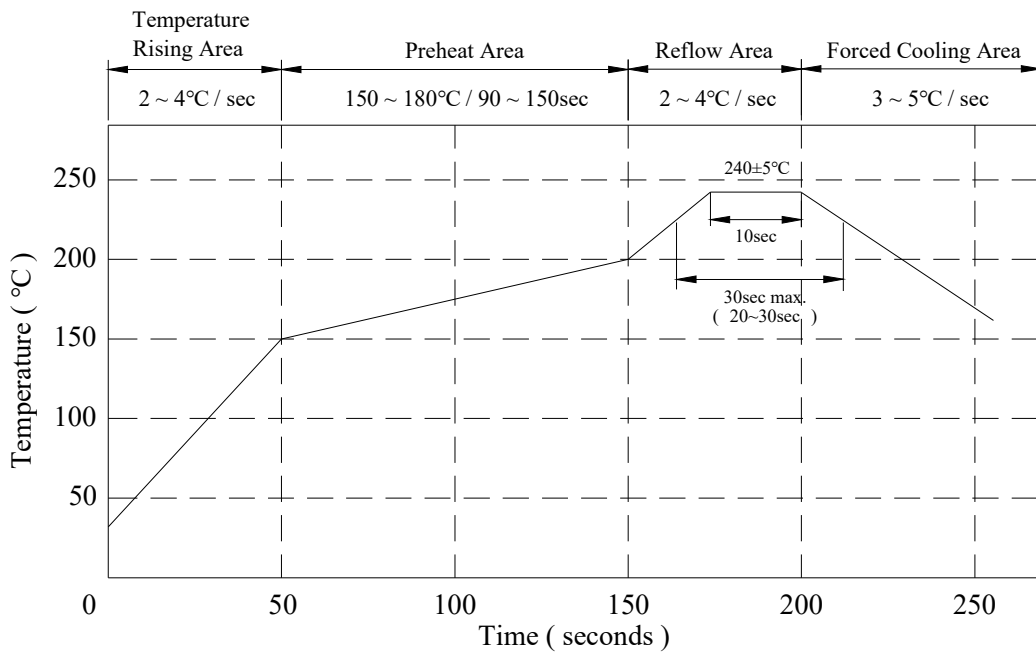
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**6 DWG Expression :**



**7 Classification Reflow Profile :**

Peak Temp : 245°C max.  
 Max time above 225°C : 30sec max.  
 Max time above 200°C : 50sec max.





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**8 Reliability Test :**

1-1.Mechanical Performance

No	Item	Specification	Test Method
1	Vibration	Appearance : No damage Inductance : within±10% of initial value	Test device shall be soldered on the substrate Oscillation Frequency : 10 to 55 to 10Hz for 1min Amplitude : 1.5mm Time : 2hrs for each axis (X, Y & Z), total 6hrs
2	Resistance to Soldering Heat	Appearance : No damage	Pre-heating : 150°C, 1min Solder Composition : Sn/Ag3.0/Cu0.5 Solder Temperature : 260±5°C Immersion Time : 10±1sec
3	Solder ability	The electrodes shall be at least 90% covered with new solder coating	Pre-heating : 150°C, 1min Solder Composition : Sn/Ag3.0/Cu0.5 Solder Temperature : 245±5°C Immersion Time : 4±1sec
4	Resistance to solvent	There must be no change in appearance or obliteration of marking.	Inductors must withstand 6 minutes of alcohol or water.

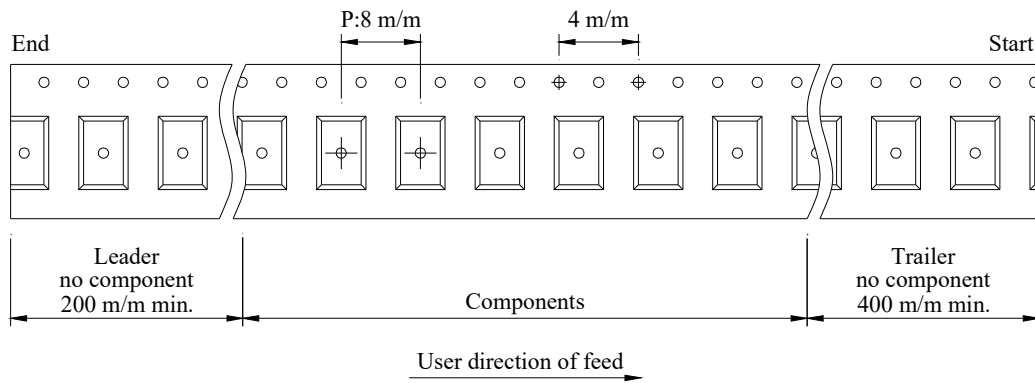
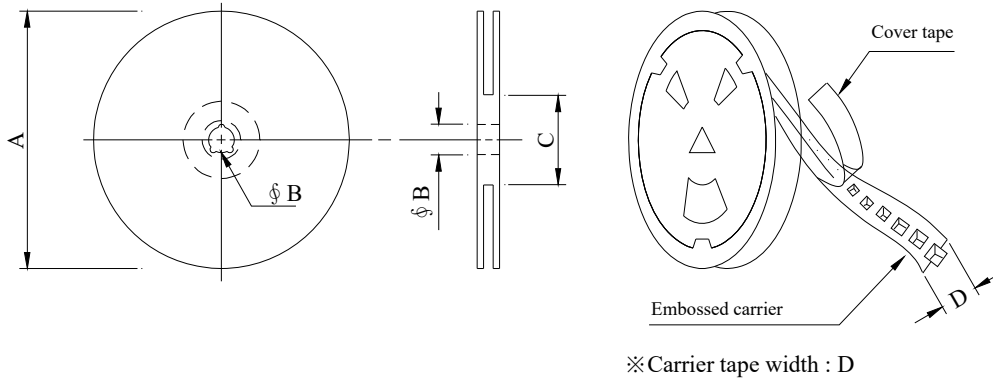
1-2.Environmental Performance

No	Item	Specification	Test Method		
1	Temperature Shock	Appearance : No damage Inductance : within±10% of initial value	10 cycles (Air to Air) 1 cycles shall consist of: 30 minutes exposure to -55 °C 30 minutes exposure to 125 °C 15 seconds maximum transition between temperatures		
2	Temperature Cycle		One cycle :		
			Step	Temperature (°C)	Time (min)
			1	-25±3	30
			2	25±2	3
			3	85±3	30
4	25±2	3			
			Total : 100cycles Measured after exposure in the room condition for 24hrs		
3	Humidity Resistance		Temperature : 40±2°C Relative Humidity : 90 ~ 95% Time : 1000hrs Measured after exposure in the room condition for 24hrs		
4	Heat Life		Temperature : 85±3°C Relative Humidity : 20% Applied Current : Rated Current Time : 1000hrs Measured after exposure in the room condition for 24hrs		
5	Cold Resistance		Temperature : -25±3°C Relative Humidity : 0% Time : 1000hrs Measured after exposure in the room condition for 24hrs		



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**9 Packaging Information :**



Reel type	A	B	C	D	Reel Q'ty
7-12	178mm	13mm	60mm	12mm	500pcs