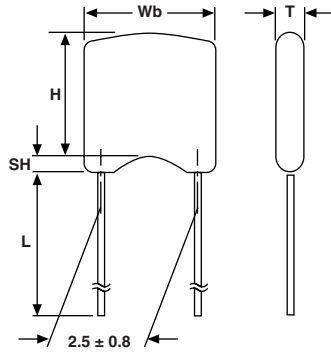
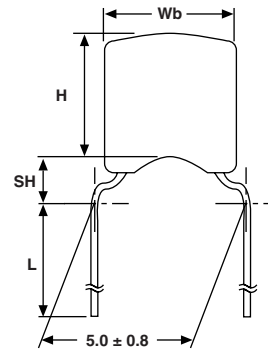


Multilayer Ceramic Dipped Radial Capacitors 200 V_{DC} and 500 V_{DC}

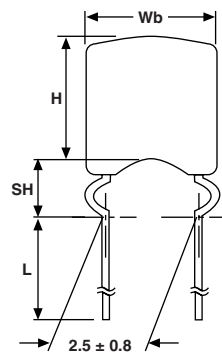
DIMENSIONS

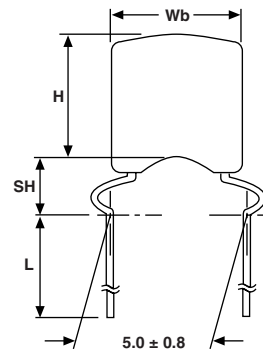
RoHS
COMPLIANT

L2

 Component outline for
lead spacing 2.5 ± 0.8 mm
(straight leads)

H5

 Component outline for
lead spacing 5.0 ± 0.8 mm
(flat bent leads)

L2 and H5 are preferred styles


K2

 Component outline for
lead spacing 2.5 ± 0.8 mm
(outside kink)

K5

 Component outline for
lead spacing 5.0 ± 0.8 mm
(outside kink)

CAPACITOR DIMENSIONS AND WEIGHT in millimeter (inches)								
SIZE	W _b _{max.}	H _{max.}	T _{max.}	MAX. SEATING HEIGHT (SH)				WEIGHT (g)
				L2	H5	K2	K5	
15	4.0 (0.157)	4.0 (0.157)	2.5 (0.098)	1.58 (0.062)	2.54 (0.100)	3.50 (0.140)	3.50 (0.140)	≈ 0.15
20	5.0 (0.197)	5.0 (0.197)	3.2 (0.126)	1.58 (0.062)	2.54 (0.100)	3.50 (0.140)	3.50 (0.140)	≈ 0.16

Note

- Bulk packed types have a standard lead length L = 25.4 mm (1.0") minimum
- Thickness is defined as "T"

QUICK REFERENCE DATA				
DESCRIPTION	VALUE			
Capacitance range	33 pF to 3900 pF		100 pF to 0.047 μF	
Rated DC voltage	200 V	500 V	200 V	500 V
Tolerance on capacitance	± 5 %, ± 10 %		± 10 %, ± 20 %	
Dielectric Code	C0G (NP0)		X7R	

ORDERING INFORMATION									
K	103	K	15	X7R	K	5	3	H	5
PRODUCT TYPE	CAPACITANCE CODE	CAPACITANCE TOLERANCE	SIZE CODE	TEMP. CHAR.	RATED VOLTAGE	LEAD DIA.	LEAD LENGTH/ PACKAGING	LEAD STYLE	LEAD SPACING
K = Mono-Kap	Two significant digits followed by the number of zeros. For example: 103 = 10 000 pF	J = ± 5 % K = ± 10 % M = ± 20 %	Ref. mech. spec.	C0G X7R	K = 200 V _{DC} L = 500 V _{DC}	5 = 0.5 mm (0.20")	3 = Bulk, with lead length of 30 ± 5.0 mm (1.25") T = Tape and reel U = Ammopack	L = Straight Lead H = High seated assy	2 = 2.5 (0.100") 5 = 5.0 (0.200")
Ordering Example: K-103-K-15-X7R-K-5-3-H-5									



CAPACITANCE RANGE CHART

COG (NPO) DIELECTRIC					
SIZE		15		20	
RATED VOLTAGE		200	500	200	500
VALUE	CODE				
10 pF	100				
12 pF	120				
15 pF	150				
18 pF	180				
22 pF	220				
27 pF	270				
33 pF	330	•	•		
39 pF	390	•	•		
47 pF	470	•	•		
56 pF	560	•	•		
68 pF	680	•	•		
82 pF	820	•	•		
100 pF	101	•	•		
120 pF	121	•	•		
150 pF	151	•	•		
180 pF	181	•	•		
220 pF	221	•	•		
270 pF	271	•	•		
330 pF	331	•	•		
390 pF	391	•	•		
470 pF	471	•			•
560 pF	561	•			•
680 pF	681	•			•
820 pF	821	•			•
1000 pF	102			•	•
1200 pF	122			•	•
1500 pF	152			•	•
1800 pF	182			•	•
2200 pF	222			•	
2700 pF	272			•	
3300 pF	332			•	
3900 pF	392			•	
4700 pF	472				
5600 pF	562				
6800 pF	682				
8200 pF	822				
0.01 μF	103				

X7R DIELECTRIC					
SIZE		15		20	
RATED VOLTAGE		200	500	200	500
VALUE	CODE				
100 pF	101	•	•		
120 pF	121	•	•		
150 pF	151	•	•		
180 pF	181	•	•		
220 pF	221	•	•		
270 pF	271	•	•		
330 pF	331	•	•		
390 pF	391	•	•		
470 pF	471	•	•		
560 pF	561	•	•		
680 pF	681	•	•		
820 pF	821	•	•		
1000 pF	102	•	•		
1200 pF	122	•	•		
1500 pF	152	•	•		
1800 pF	182	•	•		
2200 pF	222	•	•		
2700 pF	272	•	•		
3300 pF	332	•			•
3900 pF	392	•			•
4700 pF	472	•			•
5600 pF	562	•			•
6800 pF	682	•			•
8200 pF	822	•			•
0.01 μF	103	•			•
0.012 μF	123	•			•
0.015 μF	153	•			•
0.018 μF	183	•			•
0.022 μF	223	•			•
0.027 μF	273			•	•
0.033 μF	333			•	•
0.039 μF	393			•	•
0.047 μF	473			•	•
0.056 μF	563				
0.068 μF	683				
0.082 μF	823				
0.10 μF	104				
0.15 μF	154				
0.22 μF	224				
0.33 μF	334				
0.47 μF	474				
0.68 μF	684				
1.0 μF	105				

PART NUMBER LISTING - if not in range chart, please contact cml@vishay.com

MONO-KAP X7R - 200 V_{DC} CLEAR TEXT CODE				
CAPACITANCE (pF)	RATED VOLTAGE (V_{DC})	10 % TOLERANCE 13th digit (T = Reel, U = Ammo, 3 = Bulk)	20 % TOLERANCE 13th digit (T = Reel, U = Ammo, 3 = Bulk)	LEAD SPACING mm (inch)
100	200	K101K15X7RK5.L2	K101M15X7RK5.L2	2.5 (0.10)
100		K101K15X7RK5.H5	K101M15X7RK5.H5	5.0 (0.20)
120		K121K15X7RK5.L2	K121M15X7RK5.L2	2.5 (0.10)
120		K121K15X7RK5.H5	K121M15X7RK5.H5	5.0 (0.20)
150		K151K15X7RK5.L2	K151M15X7RK5.L2	2.5 (0.10)
150		K151K15X7RK5.H5	K151M15X7RK5.H5	5.0 (0.20)
180		K181K15X7RK5.L2	K181M15X7RK5.L2	2.5 (0.10)
180		K181K15X7RK5.H5	K181M15X7RK5.H5	5.0 (0.20)
220		K221K15X7RK5.L2	K221M15X7RK5.L2	2.5 (0.10)
220		K221K15X7RK5.H5	K221M15X7RK5.H5	5.0 (0.20)
270		K271K15X7RK5.L2	K271M15X7RK5.L2	2.5 (0.10)
270		K271K15X7RK5.H5	K271M15X7RK5.H5	5.0 (0.20)
330		K331K15X7RK5.L2	K331M15X7RK5.L2	2.5 (0.10)
330		K331K15X7RK5.H5	K331M15X7RK5.H5	5.0 (0.20)
390		K391K15X7RK5.L2	K391M15X7RK5.L2	2.5 (0.10)
390		K391K15X7RK5.H5	K391M15X7RK5.H5	5.0 (0.20)
470		K471K15X7RK5.L2	K471M15X7RK5.L2	2.5 (0.10)
470		K471K15X7RK5.H5	K471M15X7RK5.H5	5.0 (0.20)
560		K561K15X7RK5.L2	K561M15X7RK5.L2	2.5 (0.10)
560		K561K15X7RK5.H5	K561M15X7RK5.H5	5.0 (0.20)
680		K681K15X7RK5.L2	K681M15X7RK5.L2	2.5 (0.10)
680		K681K15X7RK5.H5	K681M15X7RK5.H5	5.0 (0.20)
820		K821K15X7RK5.L2	K821M15X7RK5.L2	2.5 (0.10)
820		K821K15X7RK5.H5	K821M15X7RK5.H5	5.0 (0.20)
1000		K102K15X7RK5.L2	K102M15X7RK5.L2	2.5 (0.10)
1000		K102K15X7RK5.H5	K102M15X7RK5.H5	5.0 (0.20)
1200		K122K15X7RK5.L2	K122M15X7RK5.L2	2.5 (0.10)
1200		K122K15X7RK5.H5	K122M15X7RK5.H5	5.0 (0.20)
1500		K152K15X7RK5.L2	K152M15X7RK5.L2	2.5 (0.10)
1500		K152K15X7RK5.H5	K152M15X7RK5.H5	5.0 (0.20)
1800		K182K15X7RK5.L2	K182M15X7RK5.L2	2.5 (0.10)
1800		K182K15X7RK5.H5	K182M15X7RK5.H5	5.0 (0.20)
2200	K222K15X7RK5.L2	K222M15X7RK5.L2	2.5 (0.10)	
2200	K222K15X7RK5.H5	K222M15X7RK5.H5	5.0 (0.20)	
2700	K272K15X7RK5.L2	K272M15X7RK5.L2	2.5 (0.10)	
2700	K272K15X7RK5.H5	K272M15X7RK5.H5	5.0 (0.20)	
3300	K332K15X7RK5.L2	K332M15X7RK5.L2	2.5 (0.10)	
3300	K332K15X7RK5.H5	K332M15X7RK5.H5	5.0 (0.20)	
3900	K392K15X7RK5.L2	K392M15X7RK5.L2	2.5 (0.10)	
3900	K392K15X7RK5.H5	K392M15X7RK5.H5	5.0 (0.20)	
4700	K472K15X7RK5.L2	K472M15X7RK5.L2	2.5 (0.10)	
4700	K472K15X7RK5.H5	K472M15X7RK5.H5	5.0 (0.20)	
5600	K562K15X7RK5.L2	K562M15X7RK5.L2	2.5 (0.10)	



Multilayer Ceramic Dipped Radial Capacitors
200 V_{DC} and 500 V_{DC}

MONO-KAP X7R - 200 V_{DC} CLEAR TEXT CODE				
CAPACITANCE (pF)	RATED VOLTAGE (V _{DC})	10 % TOLERANCE 13 th digit (T = Reel, U = Ammo, 3 = Bulk)	20 % TOLERANCE 13 th digit (T = Reel, U = Ammo, 3 = Bulk)	LEAD SPACING mm (inch)
5600	200	K562K15X7RK5.H5	K562M15X7RK5.H5	5.0 (0.20)
6800		K682K15X7RK5.L2	K682M15X7RK5.L2	2.5 (0.10)
6800		K682K15X7RK5.H5	K682M15X7RK5.H5	5.0 (0.20)
8200		K822K15X7RK5.L2	K822M15X7RK5.L2	2.5 (0.10)
8200		K822K15X7RK5.H5	K822M15X7RK5.H5	5.0 (0.20)
10 000		K103K15X7RK5.L2	K103M15X7RK5.L2	2.5 (0.10)
10 000		K103K15X7RK5.H5	K103M15X7RK5.H5	5.0 (0.20)
12 000		K123K15X7RK5.L2	K123M15X7RK5.L2	2.5 (0.10)
12 000		K123K15X7RK5.H5	K123M15X7RK5.H5	5.0 (0.20)
15 000		K153K15X7RK5.L2	K153M15X7RK5.L2	2.5 (0.10)
15 000		K153K15X7RK5.H5	K153M15X7RK5.H5	5.0 (0.20)
18 000		K183K15X7RK5.L2	K183M15X7RK5.L2	2.5 (0.10)
18 000		K183K15X7RK5.H5	K183M15X7RK5.H5	5.0 (0.20)
22 000		K223K15X7RK5.L2	K223M15X7RK5.L2	2.5 (0.10)
22 000		K223K15X7RK5.H5	K223M15X7RK5.H5	5.0 (0.20)
27 000		K273K20X7RK5.L2	K273M20X7RK5.L2	2.5 (0.10)
27 000		K273K20X7RK5.H5	K273M20X7RK5.H5	5.0 (0.20)
33 000		K333K20X7RK5.L2	K333M20X7RK5.L2	2.5 (0.10)
33 000		K333K20X7RK5.H5	K333M20X7RK5.H5	5.0 (0.20)
39 000		K393K20X7RK5.L2	K393M20X7RK5.L2	2.5 (0.10)
39 000	K393K20X7RK5.H5	K393M20X7RK5.H5	5.0 (0.20)	
47 000	K473K20X7RK5.L2	K473M20X7RK5.L2	2.5 (0.10)	
47 000	K473K20X7RK5.H5	K473M20X7RK5.H5	5.0 (0.20)	

MONO-KAP C0G - 200 V_{DC} CLEAR TEXT CODE				
CAPACITANCE (pF)	RATED VOLTAGE (V _{DC})	5 % TOLERANCE 13 th digit (T = Reel, U = Ammo, 3 = Bulk)	10 % TOLERANCE 13 th digit (T = Reel, U = Ammo, 3 = Bulk)	LEAD SPACING mm (inch)
33	200	K330J15C0GK5.L2	K330K15C0GK5.L2	2.5 (0.10)
33		K330J15C0GK5.H5	K330K15C0GK5.H5	5.0 (0.20)
39		K390J15C0GK5.L2	K390K15C0GK5.L2	2.5 (0.10)
39		K390J15C0GK5.H5	K390K15C0GK5.H5	5.0 (0.20)
47		K470J15C0GK5.L2	K470K15C0GK5.L2	2.5 (0.10)
47		K470J15C0GK5.H5	K470K15C0GK5.H5	5.0 (0.20)
56		K560J15C0GK5.L2	K560K15C0GK5.L2	2.5 (0.10)
56		K560J15C0GK5.H5	K560K15C0GK5.H5	5.0 (0.20)
68		K680J15C0GK5.L2	K680K15C0GK5.L2	2.5 (0.10)
68		K680J15C0GK5.H5	K680K15C0GK5.H5	5.0 (0.20)
82		K820J15C0GK5.L2	K820K15C0GK5.L2	2.5 (0.10)
82		K820J15C0GK5.H5	K820K15C0GK5.H5	5.0 (0.20)
100		K101J15C0GK5.L2	K101K15C0GK5.L2	2.5 (0.10)
100		K101J15C0GK5.H5	K101K15C0GK5.H5	5.0 (0.20)
120		K121J15C0GK5.L2	K121K15C0GK5.L2	2.5 (0.10)
120		K121J15C0GK5.H5	K121K15C0GK5.H5	5.0 (0.20)



MONO-KAP COG - 200 V_{DC} CLEAR TEXT CODE				
CAPACITANCE (pF)	RATED VOLTAGE (V_{DC})	5 % TOLERANCE 13th digit (T = Reel, U = Ammo, 3 = Bulk)	10 % TOLERANCE 13th digit (T = Reel, U = Ammo, 3 = Bulk)	LEAD SPACING mm (inch)
150	200	K151J15C0GK5.L2	K151K15C0GK5.L2	2.5 (0.10)
150		K151J15C0GK5.H5	K151K15C0GK5.H5	5.0 (0.20)
180		K181J15C0GK5.L2	K181K15C0GK5.L2	2.5 (0.10)
180		K181J15C0GK5.H5	K181K15C0GK5.H5	5.0 (0.20)
220		K221J15C0GK5.L2	K221K15C0GK5.L2	2.5 (0.10)
220		K221J15C0GK5.H5	K221K15C0GK5.H5	5.0 (0.20)
270		K271J15C0GK5.L2	K271K15C0GK5.L2	2.5 (0.10)
270		K271J15C0GK5.H5	K271K15C0GK5.H5	5.0 (0.20)
330		K331J15C0GK5.L2	K331K15C0GK5.L2	2.5 (0.10)
330		K331J15C0GK5.H5	K331K15C0GK5.H5	5.0 (0.20)
390		K391J15C0GK5.L2	K391K15C0GK5.L2	2.5 (0.10)
390		K391J15C0GK5.H5	K391K15C0GK5.H5	5.0 (0.20)
470		K471J15C0GK5.L2	K471K15C0GK5.L2	2.5 (0.10)
470		K471J15C0GK5.H5	K471K15C0GK5.H5	5.0 (0.20)
560		K561J15C0GK5.L2	K561K15C0GK5.L2	2.5 (0.10)
560		K561J15C0GK5.H5	K561K15C0GK5.H5	5.0 (0.20)
680		K681J15C0GK5.L2	K681K15C0GK5.L2	2.5 (0.10)
680		K681J15C0GK5.H5	K681K15C0GK5.H5	5.0 (0.20)
820		K821J15C0GK5.L2	K821K15C0GK5.L2	2.5 (0.10)
820		K821J15C0GK5.H5	K821K15C0GK5.H5	5.0 (0.20)
1000		K102J20C0GK5.L2	K102K20C0GK5.L2	2.5 (0.10)
1000		K102J20C0GK5.H5	K102K20C0GK5.H5	5.0 (0.20)
1200		K122J20C0GK5.L2	K122K20C0GK5.L2	2.5 (0.10)
1200		K122J20C0GK5.H5	K122K20C0GK5.H5	5.0 (0.20)
1500		K152J20C0GK5.L2	K152K20C0GK5.L2	2.5 (0.10)
1500		K152J20C0GK5.H5	K152K20C0GK5.H5	5.0 (0.20)
1800		K182J20C0GK5.L2	K182K20C0GK5.L2	2.5 (0.10)
1800		K182J20C0GK5.H5	K182K20C0GK5.H5	5.0 (0.20)
2200		K222J20C0GK5.L2	K222K20C0GK5.L2	2.5 (0.10)
2200		K222J20C0GK5.H5	K222K20C0GK5.H5	5.0 (0.20)
2700		K272J20C0GK5.L2	K272K20C0GK5.L2	2.5 (0.10)
2700		K272J20C0GK5.H5	K272K20C0GK5.H5	5.0 (0.20)
3300	K332J20C0GK5.L2	K332K20C0GK5.L2	2.5 (0.10)	
3300	K332J20C0GK5.H5	K332K20C0GK5.H5	5.0 (0.20)	
3900	K392J20C0GK5.L2	K392K20C0GK5.L2	2.5 (0.10)	
3900	K392J20C0GK5.H5	K392K20C0GK5.H5	5.0 (0.20)	



Multilayer Ceramic Dipped Radial Capacitors
200 V_{DC} and 500 V_{DC}

MONO-KAP X7R - 500 V_{DC} CLEAR TEXT CODE				
CAPACITANCE (pF)	RATED VOLTAGE (V_{DC})	10 % TOLERANCE 13th digit (T = Reel, U = Ammo, 3 = Bulk)	20 % TOLERANCE 13th digit (T = Reel, U = Ammo, 3 = Bulk)	LEAD SPACING mm (inch)
100	500	K101K15X7RL5.H5	K101M15X7RL5.H5	5.0 (0.20)
120		K121K15X7RL5.H5	K121M15X7RL5.H5	5.0 (0.20)
150		K151K15X7RL5.H5	K151M15X7RL5.H5	5.0 (0.20)
180		K181K15X7RL5.H5	K181M15X7RL5.H5	5.0 (0.20)
220		K221K15X7RL5.H5	K221M15X7RL5.H5	5.0 (0.20)
270		K271K15X7RL5.H5	K271M15X7RL5.H5	5.0 (0.20)
330		K331K15X7RL5.H5	K331M15X7RL5.H5	5.0 (0.20)
390		K391K15X7RL5.H5	K391M15X7RL5.H5	5.0 (0.20)
470		K471K15X7RL5.H5	K471M15X7RL5.H5	5.0 (0.20)
560		K561K15X7RL5.H5	K561M15X7RL5.H5	5.0 (0.20)
680		K681K15X7RL5.H5	K681M15X7RL5.H5	5.0 (0.20)
820		K821K15X7RL5.H5	K821M15X7RL5.H5	5.0 (0.20)
1000		K102K15X7RL5.H5	K102M15X7RL5.H5	5.0 (0.20)
1200		K122K15X7RL5.H5	K122M15X7RL5.H5	5.0 (0.20)
1500		K152K15X7RL5.H5	K152M15X7RL5.H5	5.0 (0.20)
1800		K182K15X7RL5.H5	K182M15X7RL5.H5	5.0 (0.20)
2200		K222K15X7RL5.H5	K222M15X7RL5.H5	5.0 (0.20)
2700		K272K15X7RL5.H5	K272M15X7RL5.H5	5.0 (0.20)
3300		K332K20X7RL5.H5	K332M20X7RL5.H5	5.0 (0.20)
3900		K392K20X7RL5.H5	K392M20X7RL5.H5	5.0 (0.20)
4700		K472K20X7RL5.H5	K472M20X7RL5.H5	5.0 (0.20)
5600		K562K20X7RL5.H5	K562M20X7RL5.H5	5.0 (0.20)
6800		K682K20X7RL5.H5	K682M20X7RL5.H5	5.0 (0.20)
8200		K822K20X7RL5.H5	K822M20X7RL5.H5	5.0 (0.20)
10 000		K103K20X7RL5.H5	K103M20X7RL5.H5	5.0 (0.20)
12 000		K123K20X7RL5.H5	K123M20X7RL5.H5	5.0 (0.20)
15 000		K153K20X7RL5.H5	K153M20X7RL5.H5	5.0 (0.20)
18 000		K183K20X7RL5.H5	K183M20X7RL5.H5	5.0 (0.20)
22 000		K223K20X7RL5.H5	K223M20X7RL5.H5	5.0 (0.20)
27 000		K273K20X7RL5.H5	K273M20X7RL5.H5	5.0 (0.20)
33 000	K333K20X7RL5.H5	K333M20X7RL5.H5	5.0 (0.20)	
39 000	K393K20X7RL5.H5	K393M20X7RL5.H5	5.0 (0.20)	
47 000	K473K20X7RL5.H5	K473M20X7RL5.H5	5.0 (0.20)	



MONO-KAP COG - 500 V_{DC} CLEAR TEXT CODE				
CAPACITANCE (pF)	RATED VOLTAGE (V_{DC})	5 % TOLERANCE 13th digit (T = Reel, U = Ammo, 3 = Bulk)	10 % TOLERANCE 13th digit (T = Reel, U = Ammo, 3 = Bulk)	LEAD SPACING mm (inch)
33	500	K330J15C0GL5.H5	K330K15C0GL5.H5	5.0 (0.20)
39		K390J15C0GL5.H5	K390K15C0GL5.H5	5.0 (0.20)
47		K470J15C0GL5.H5	K470K15C0GL5.H5	5.0 (0.20)
56		K560J15C0GL5.H5	K560K15C0GL5.H5	5.0 (0.20)
68		K680J15C0GL5.H5	K680K15C0GL5.H5	5.0 (0.20)
82		K820J15C0GL5.H5	K820K15C0GL5.H5	5.0 (0.20)
100		K101J15C0GL5.H5	K101K15C0GL5.H5	5.0 (0.20)
120		K121J15C0GL5.H5	K121K15C0GL5.H5	5.0 (0.20)
150		K151J15C0GL5.H5	K151K15C0GL5.H5	5.0 (0.20)
180		K181J15C0GL5.H5	K181K15C0GL5.H5	5.0 (0.20)
220		K221J15C0GL5.H5	K221K15C0GL5.H5	5.0 (0.20)
270		K271J15C0GL5.H5	K271K15C0GL5.H5	5.0 (0.20)
330		K331J15C0GL5.H5	K331K15C0GL5.H5	5.0 (0.20)
390		K391J15C0GL5.H5	K391K15C0GL5.H5	5.0 (0.20)
470		K471J20C0GL5.H5	K471K20C0GL5.H5	5.0 (0.20)
560		K561J20C0GL5.H5	K561K20C0GL5.H5	5.0 (0.20)
680		K681J20C0GL5.H5	K681K20C0GL5.H5	5.0 (0.20)
820		K821J20C0GL5.H5	K821K20C0GL5.H5	5.0 (0.20)
1000		K102J20C0GL5.H5	K102K20C0GL5.H5	5.0 (0.20)
1200		K122J20C0GL5.H5	K122K20C0GL5.H5	5.0 (0.20)
1500	K152J20C0GL5.H5	K152K20C0GL5.H5	5.0 (0.20)	
1800	K182J20C0GL5.H5	K182K20C0GL5.H5	5.0 (0.20)	



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