

RH series

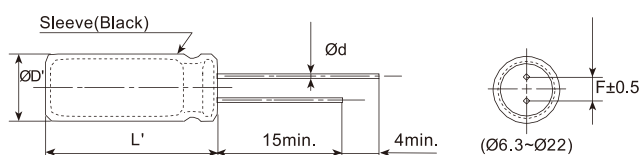
- High frequency, low impedance
- Endurance: +105°C 2,000~3,000 hours
- RoHS Compliant



SPECIFICATIONS

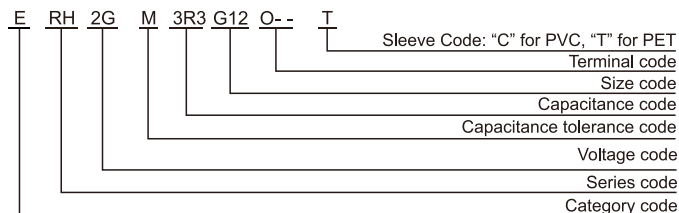
Items	Characteristics							
Category Temperature Range	-40~+105°C(160 ~400 V _{dc}) -25~+105°C(450 V _{dc})							
Rated Voltage Range	160~450 V _{dc}							
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)							
Leakage Current	I≤0.02CV or 10μA, whichever is greater. Where, I:Max.leakage current (μA), C:Nominal capacitance (μF), V: Rated voltage (V) (at 20°C after 2 minutes)							
Dissipation Factor (tanδ)	Rated Voltage(V _{dc})	160	200	250	350	400	450	(at 20°C, 120Hz)
	tanδ (max.)	0.12	0.12	0.12	0.15	0.15	0.20	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage(V _{dc})	160	200	250	350	400	450	(at 120Hz)
	Z(-25°C)/Z(+20°C)	3	5				6	
	Z(-40°C)/Z(+20°C)	4	7				-	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after DC voltage plus the rated ripple current is applied for a specified period of time at 105°C.							
	Capacitance Change	≤±20% of the initial value						
	D.F. (tanδ)	≤200% of the initial specified value					Case Dia.	Load Life (hours)
	Leakage Current	≤The initial specified value					ØD≤8	2,000
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied.							
	Capacitance Change	≤±20% of the initial value						
	D.F. (tanδ)	≤200% of the initial specified value					ØD≥10	3,000
	Leakage Current	≤200% of the initial specified value						

DIMENSIONS[mm]



ØD	6.3	8	10	12.5	16	18	22
Ød	0.5	0.5	0.6	0.6	0.8	0.8	0.8
F	2.5	3.5	5.0	5.0	7.5	7.5	10.0
ØD'	ØD+0.5max.						
L'	L+2max.						

PART NUMBERING SYSTEM



RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

Freq.(Hz)	120	1k	10k	100k
Cap.(μF)				
Cap.<10	0.40	0.70	0.92	1.00
10≤Cap.<100	0.56	0.83	0.95	1.00
100≤Cap.≤1000	0.67	0.87	0.96	1.00

The endurance of capacitors is shortened with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.

RH series

STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Size ΦDxL(mm)	tanδ	Rated ripple current (mA _{rms} /105°C,100kHz)
160(2C)	2.2	6.3*11	0.12	80
	3.3	6.3*11	0.12	103
	4.7	8*12	0.12	121
	10	10*12	0.12	150
	22	10*16	0.12	228
	33	10*20	0.12	293
	47	12.5*20	0.12	368
	100	12.5*25	0.12	587
200(2D)	220	16*30	0.12	883
	1	5*11	0.12	50
	2.2	6.3*11	0.12	77
	3.3	6.3*11	0.12	103
	4.7	8*12	0.12	121
	10	10*12	0.12	152
	22	10*16	0.12	228
		10*20	0.12	238
	33	10*20	0.12	319
		12.5*20	0.12	365
	47	12.5*20	0.12	405
	56	12.5*25	0.12	476
	68	12.5*25	0.12	540
	82	10*30	0.12	574
	100	16*25	0.12	774
	120	16*25	0.12	801
250(2E)	150	18*25	0.12	908
	180	12.5*35	0.12	948
	220	18*30	0.12	1032
	0.47	6.3*11	0.12	32
	1	6.3*11	0.12	59
	2.2	6.3*11	0.12	77
	3.3	8*12	0.12	106
	4.7	8*12	0.12	124
	10	10*12	0.12	152
	22	10*20	0.12	244
	33	12.5*20	0.12	371
	47	12.5*25	0.12	423
	56	12.5*25	0.12	472
	82	16*25	0.12	637
	100	16*30	0.12	795
	220	18*35	0.12	1085
350(2V)	330	18*45	0.12	1182
	470	22*46	0.12	1290
	0.47	6.3*11	0.15	32
	1	6.3*11	0.15	59
	2.2	8*12	0.15	80
	3.3	8*12	0.15	109
		10*12	0.15	118
	4.7	10*16	0.15	153
	10	10*16	0.15	179
	22	12.5*25	0.15	316
	33	16*25	0.15	365
	47	16*30	0.15	532

WV (V _{dc})	Cap (μF)	Size ΦDxL(mm)	tanδ	Rated ripple current (mA _{rms} /105°C,100kHz)
400(2G)	1	8*12	0.15	59
	2.2	8*12	0.15	91
	3.3	8*12	0.15	125
		10*12	0.15	133
	4.7	10*12	0.15	156
	10	10*16	0.15	184
		10*20	0.15	211
	22	12.5*20	0.15	332
	27	10*30	0.15	426
	33	10*35	0.15	498
		16*20	0.15	487
	39	10*40	0.15	543
	47	12.5*30	0.15	659
		16*25	0.15	647
	56	10*45	0.15	725
		12.5*35	0.15	720
	68	12.5*40	0.15	902
		16*30	0.15	864
	82	12.5*40	0.15	941
		18*30	0.15	924
450(2W)	100	12.5*50	0.15	956
		18*30	0.15	935
	120	22*31	0.15	962
		12.5*60	0.15	1021
	150	22*31	0.15	1010
	1	8*12	0.20	59
	2.2	10*12	0.20	96
	3.3	10*16	0.20	136
	4.7	10*20	0.20	159
	10	12.5*20	0.20	169
	18	10*30	0.20	221
	22	16*20	0.20	338
	27	10*30	0.20	426
	33	10*35	0.20	509
		16*25	0.20	504
	39	10*40	0.20	554
		10*45	0.20	703
	47	12.5*30	0.20	698
		18*25	0.20	686
	56	12.5*35	0.20	781
		18*25	0.20	769
	68	12.5*40	0.20	830
		18*30	0.20	808
	82	12.5*45	0.20	886
		18*30	0.20	853
	100	18*35	0.20	924
	120	18*40	0.20	1128
	150	22*40	0.20	1354
	220	22*46	0.20	1537