

HF series

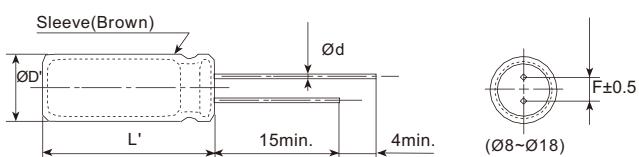
- Long life, high ripple current; For power supply applications
 - Endurance: 5,000~10,000 hours at 105°C
 - **RoHS Compliant**



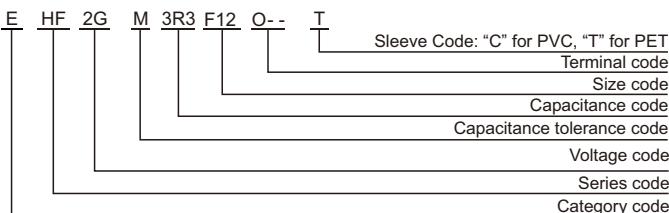
SPECIFICATIONS

Items	Characteristics								
Category Temperature Range	-40~+105°C(160~450V _{dc})								
Rated Working Voltage Range	160~450 V _{dc}								
Capacitance Tolerance	$\pm 20\% (M)$								
Leakage Current			After 1 minute		After 5 minutes		Where, I :Max.leakage current (μA), C:Nominal capacitance (μF), V: Rated voltage (V) (at 20°C)		
	CV≤1000		$I \leq 0.1CV + 40\mu A$		$I \leq 0.03CV + 15\mu A$				
	CV>1000		$I \leq 0.04CV + 100\mu A$		$I \leq 0.02CV + 25\mu A$				
Dissipation Factor (tanδ)	Rated Voltage(V _{dc})	160	200	250	350	400	450	(at 20°C,120Hz)	
	Dissipation Factor(Max.)	0.15	0.15	0.15	0.20	0.20	0.20		
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage(V _{dc})	160	200	250	350	400	450		
	Z(-25°C)/Z(+20°C)	3	3	3	6	6	6		
	Z(-40°C)/Z(+20°C)	8	8	8	10	10	10		
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	$\leq \pm 20\%$ of the initial value					Case Dia.(mm)		
	Dissipation Factor	$\leq 200\%$ of the initial specified value					ØD≤8		
	Leakage Current	\leq The initial specified value					ØD=10	8,000	
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	$\leq \pm 20\%$ of the initial value					ØD≥12.5		
	Dissipation Factor	$\leq 200\%$ of the initial specified value					10,000		
	Leakage Current	$\leq 200\%$ of the initial specified value							

DIMENSIONS[mm]



PART NUMBERING SYSTEM



RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

Freq.(Hz) WV (Vdc)	120	1k	10k	100k
<100	1.0	1.75	2.25	2.50
≥100	1.0	1.67	2.05	2.25

HF series

STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Size ΦDxL(mm)	Rated ripple current (mArms/105°C, 120Hz)	Part Number
160	10	8×12	78	EHF2CM100F12---T
	12	8×12	88	EHF2CM120F12---T
	15	8×16	112	EHF2CM150F16---T
	22	10×12	139	EHF2CM220G12---T
	33	10×16	210	EHF2CM330G16---T
	39	10×16	231	EHF2CM390G16---T
	47	8×20	230	EHF2CM470F20---T
	47	10×16	230	EHF2CM470G16---T
	56	10×20	267	EHF2CM560G20---T
	68	12.5×20	478	EHF2CM680W20---T
	82	10×25	466	EHF2CM820G25---T
	82	12.5×20	510	EHF2CM820W20---T
	100	12.5×25	630	EHF2CM101W25---T
	100	16×20	635	EHF2CM101L20---T
	150	16×20	770	EHF2CM151L20---T
	150	16×25	790	EHF2CM151L25---T
	220	16×25	1020	EHF2CM221L25---T
	220	18×25	1045	EHF2CM221M25---T
	330	18×30	1402	EHF2CM331M30---T
200	10	8×12	77	EHF2DM100F12---T
	12	10×12	113	EHF2DM120G12---T
	15	8×18	120	EHF2DM150F18---T
	22	10×16	172	EHF2DM220G16---T
	33	10×20	255	EHF2DM330G20---T
	33	12.5×16	225	EHF2DM330W16---T
	39	12.5×16	263	EHF2DM390W16---T
	47	12.5×20	392	EHF2DM470W20---T
	68	12.5×20	470	EHF2DM680W20---T
	68	12.5×25	485	EHF2DM680W25---T
	82	16×20	554	EHF2DM820L20---T
	100	12.5×25	551	EHF2DM101W25---T
	100	16×20	556	EHF2DM101L20---T
	150	16×25	840	EHF2DM151L25---T
	150	16×30	865	EHF2DM151L30---T
	150	18×25	870	EHF2DM151M25---T
	220	18×25	1050	EHF2DM221M25---T
	220	18×30	1080	EHF2DM221M30---T
	330	18×35	1430	EHF2DM331M35---T
	330	16×45	1404	EHF2DM331L45---T
250	4.7	8×12	70	EHF2EM4R7F12---T
	5.6	8×12	75	EHF2EM5R6F12---T
	6.8	10×12	110	EHF2EM6R8G12---T
	10	10×12	115	EHF2EM100G12---T
	22	10×16	172	EHF2EM220G16---T
	33	10×20	248	EHF2EM330G20---T
	39	10×25	315	EHF2EM390G25---T
	47	12.5×20	328	EHF2EM470W20---T
	56	12.5×20	340	EHF2EM560W20---T
	68	16×20	528	EHF2EM680L20---T
	82	16×20	550	EHF2EM820L20---T
	82	16×25	560	EHF2EM820L25---T
	100	12.5×30	584	EHF2EM101W30---T
	100	16×25	604	EHF2EM101L25---T
	150	18×25	866	EHF2EM151M25---T
	180	18×25	961	EHF2EM181M25---T
	220	18×30	923	EHF2EM221M30---T
350	4.7	10×12	70	EHF2VM4R7G12---T
	5.6	10×12	90	EHF2VM5R6G12---T
	6.8	10×16	112	EHF2VM6R8G16---T
	10	10×20	140	EHF2VM100G20---T
	22	12.5×20	265	EHF2VM220W20---T
	33	16×20	364	EHF2VM330L20---T
	39	16×20	385	EHF2VM390L20---T
	47	16×20	430	EHF2VM470L20---T

※ Specifications subject to change without notice.

WV (V _{dc})	Cap (μF)	Size ΦDxL(mm)	Rated ripple current (mArms/105°C, 120Hz)	Part Number
350	47	16×25	445	EHF2VM470L25---T
	68	16×25	560	EHF2VM680L25---T
	68	18×20	550	EHF2VM680M20---T
	68	18×25	570	EHF2VM680M25---T
	82	18×25	618	EHF2VM820M25---T
	100	18×25	700	EHF2VM101M25---T
	100	18×30	725	EHF2VM101M30---T
	120	18×30	836	EHF2VM121M30---T
	150	18×35	970	EHF2VM151M35---T
	1	6.3×9	18	EHF2GM010E09---T
	2.2	6.3×12	34	EHF2GM2R2E12---T
	3.3	8×12	60	EHF2GM3R3F12---T
	4.7	8×12	65	EHF2GM4R7F12---T
	6.8	8×12	70	EHF2GM6R8F12---T
	10	10×16	121	EHF2GM100G16---T
	15	10×16	142	EHF2GM150G16---T
	22	10×18	182	EHF2GM220G18---T
	22	12.5×16	196	EHF2GM220W16---T
	33	16×20	368	EHF2GM330L20---T
	39	12.5×25	370	EHF2GM390W25---T
	47	16×20	400	EHF2GM470L20---T
	47	16×25	460	EHF2GM470L25---T
	47	18×20	412	EHF2GM470M20---T
	56	16×25	500	EHF2GM560L25---T
400	68	12.5×40	600	EHF2GM680W40---T
	68	18×25	590	EHF2GM680M25---T
	82	12.5×45	625	EHF2GM820W45---T
	82	18×25	610	EHF2GM820M25---T
	82	18×30	630	EHF2GM820M30---T
	100	12.5×50	790	EHF2GM101W50---T
	100	18×30	745	EHF2GM101M30---T
	100	18×35	785	EHF2GM101M35---T
	120	18×35	870	EHF2GM121M35---T
	150	18×40	985	EHF2GM151M40---T
	6.8	8×12	60	EHF2WM6R8F12---T
	10	10×16	120	EHF2WM100G16---T
	10	12.5×20	185	EHF2WM100W20---T
	15	16×16	245	EHF2WM150L16---T
	22	16×20	295	EHF2WM220L20---T
	27	12.5×25	305	EHF2WM270W25---T
	33	16×20	338	EHF2WM330L20---T
	33	16×25	390	EHF2WM330L25---T
	39	13×25	348	EHF2WM390K25---T
	47	16×25	400	EHF2WM470L25---T
	47	18×20	456	EHF2WM470M20---T
	47	18×25	496	EHF2WM470M25---T
	56	12.5×40	550	EHF2WM560W40---T
	68	18×25	558	EHF2WM680M25---T
	82	12.5×50	730	EHF2WM820W50---T
	82	18×30	638	EHF2WM820M30---T
	100	18×35	750	EHF2WM101M35---T
	120	22×30	826	EHF2WM121O30---T

Radial Type