HF2 Series

Useful of 4,000 hours at 85°C (Warranty of 2,000 hours at 85°C)

- Conform RoHS

Features

- The HF2 type is the same as the HP3 type. with 20mm hight.

Product code: (Example) HF2 series 200V 150μF±20%

HF2 2D 151 M C A WP EC

- HF2: Type of series
- 2D: Rated voltage code
- 151: Capacitance code
- M: Capacitance tolerance code
- C: Terminal code
- A: Case dia code
- WP: Without plate(standard)
- EC: Lead-Free and PVC-Free(standard)

Case dia code

øD	Code
22	X
25	Y
30	Z
35	A

Refer to page (85) for other terminal shape available on request

Product Specifications

Items	Specifications
Temperature range	–40°C ~ +85°C
Rated voltage	160 ~ 450V.DC
Capacitance tolerance	±20% (20°C,120Hz)
Leakage current	0.02CV (μA) or 3mA, whichever is smaller or less [C = nominal capacitance (μF), V = rated voltage (V)]
Dissipation factor	Less than the value specified in the standard products table. (20˚C,120Hz)
Permissible ripple current	As specified in the standard products table. (85˚C,120Hz)
High temp. Load life test	After 85°C, 2000h, rated voltage with specified ripple current application Capacitance variation : Initial value ±15% Dissipation factor : 175% of less of specified initial value Leakage current : Not greater than the specified initial value
Others	JIS C 5101-4.

Ripple current correction coefficient

Temperature (°C)	60	70	85		
Correction coefficient	1.4	1.2	1.0		
Frequency (Hz)	50/60	120	300	1K	≧10K
Correction coefficient	0.7	1.0	1.1	1.3	1.4

A continuous load should be avoided over 10 A at the terminal in accordance with the permissible current.

Standard Products Table

Rated Voltage Code (Surge Voltage) (V. DC)	Capacitance (μF)	Case size øDXL(mm)	tanδ 20°C,120Hz	Ripple current (Arms) 85°C,120Hz	ESR(typ.) 20°C,100Hz (mΩ)	Product name
160 2C (200)	150	22×20	0.15	0.74	955	HF22C151MCXWPEC
	220	22×20	0.15	0.98	651	HF22C221MCXWPEC
	330	30×20	0.15	1.31	434	HF22C331MCZWPEC
	470	35×20	0.15	1.47	305	HF22C471MCAWPEC
180 2P (225)	100	22×20	0.15	0.61	1226	HF22P101MCXWPEC
	150	22×20	0.15	0.74	817	HF22P151MCXWPEC
	220	22×20	0.15	0.98	557	HF22P221MCXWPEC
	330	30×20	0.15	1.31	375	HF22P331MCZWPEC
	470	35×20	0.15	1.47	265	HF22P471MCAWPEC
200 2D (250)	100	22×20	0.15	0.61	1067	HF22D101MCXWPEC
	150	35×20	0.15	0.74	711	HF22D151MCAWPEC
	220	35×20	0.15	0.98	485	HF22D221MCAWPEC
	330	35×20	0.15	1.23	325	HF22D331MCAWPEC
250 2E (300)	100	22×20	0.15	0.61	1067	HF22E101MCXWPEC
	150	25×20	0.15	0.81	711	HF22E151MCYWPEC
	220	30×20	0.15	1.07	485	HF22E221MCZWPEC
	330	35×20	0.15	1.23	325	HF22E331MCAWPEC
350 2V (400)	47	22×20	0.15	0.42	2270	HF22V470MCXWPEC
	68	25×20	0.15	0.54	1569	HF22V680MCYWPEC
	100	30×20	0.15	0.72	1065	HF22V101MCZWPEC
	150	35×20	0.15	0.94	710	HF22V151MCAWPEC
400 2G (450)	47	22×20	0.15	0.42	2270	HF22G470MCXWPEC
	68	25×20	0.15	0.54	1569	HF22G680MCYWPEC
	100	30×20	0.15	0.72	1065	HF22G101MCZWPEC
	150	35×20	0.15	0.94	710	HF22G151MCAWPEC
450 2W (500)	33	22×20	0.15	0.35	3330	HF22W330MCXWPEC
	47	25×20	0.15	0.46	2338	HF22W470MCYWPEC
	68	30×20	0.15	0.59	1616	HF22W680MCZWPEC
	100	35×20	0.15	0.77	1100	HF22W101MCAWPEC

Life time graph

Useful life depending on ambient temperature Ta and ripple current operating conditions Ir versus rated ripple current at 85℃,120Hz