

The diagram illustrates the HV power supply system architecture. At the top, the main resistor board is shown as a ladder network of resistors (R1, R2, R3, Rf) connected to a series of feed capacitors (FC0 to FC58) with decreasing negative voltages from -180kV to -6kV. A parallel resistor board (R4) is connected to the main board between FC1 and FC5. A beam plug resistor chain (R5) is connected to the main board between FC5 and FC6. The system is grounded to APA GND. A voltage Vf (-1.5kV) is indicated at the output.

Main resistor board:

	R1	R2	R3	Rf
VALUE (M Ω)	500	1000	1500	500
CURRENT (μ A)	3.0	3.0	3.0	3.0

Parallel resistor board (when beam plug is installed):

	R4
VALUE (M Ω)	800
CURRENT (μ A)	3.7

Beam plug resistor chain:

	R5
VALUE (M Ω)	15000
CURRENT (μ A)	1.8

Total Current Draw = 9.6 μ A

	R1	R2	R3	Rf
VALUE (MΩ)	500	1000	1500	500
CURRENT (μA)	3.0	3.0	3.0	3.0

	R4
VALUE (M Ω)	800
CURRENT (μ A)	3.7

	R5
VALUE (M Ω)	15000
CURRENT (μ A)	1.8

Total Current Draw = 9.6 μ A