

# BETA RADIATION COUNTERS

The counters are designed to be operated in various dosimetric and radiometric devices.

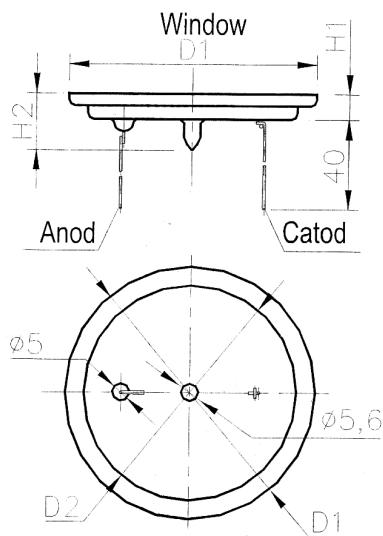
Besides beta-particles, the counters can register alpha-particles and gamma radiation. To register alpha-and beta-particles the counters «Beta -1», «Beta-1-1», «Beta-2», «Beta-2-1», CI8B are provided with a thin mica window, and for register gamma-particles the counters «Beta -2M», «Beta-2M-1» a window metal. The other design peculiarity is a minimal possible cathode surface (in comparison with cylindrical end-window beta-counters) that allows registering alpha-and beta-radiation.

The counters «Beta-1», «Beta-1-1», «Beta-2», «Beta-2-1», «Beta-2M», «Beta-2M-1» and CI8B-1 are produced in a baseless modification, and the counter SI8B is produced in base modifications.

Main Data:

Counter Type	Work. Voltage	Plateau Length/ Inclination	Sensitiv. to Gamma Radiation	Own Back - ground	Efficiency to Beta-Radiation $^{90}\text{Sr}$	Win-dow Area	Mica Thick-ness	Operating Tempe- rature Range	Service Life	Overall Dimensions, mm			
	V	V / %/V	Puls./ $\mu\text{R}$	Pulses/s	%	$\text{cm}^2$	$\mu\text{m}$	$^{\circ}\text{C}$	Pulses	D1	D2	H1	H2
<b>Counters of Soft Beta-Radiation</b>													
Beta-1 Beta-1-1	400	200/0.25	120	0.6	65	7	10±14	+60÷-50	$1\times 10^{10}$	44 44	34 34	8 8	20 -
Beta-2 Beta-2-1	400	200/0.25	200	1.0	65	15	10±14	+60÷-50	$1\times 10^{10}$	56.5 56.5	46.2 46.2	8 7.5	20 -
CI8B CI8B-1	400	80/0.3	400	2.0	65	30	14±17	+50÷-40	$1\times 10^{10}$	80 80	71 71	17 20	30 20
<b>Counters Gamma-Radiation</b>													
Beta-2M Beta-2M-1	400	200/0.25	200	1.0			metal	+60÷-50	$1\times 10^{10}$	56.5 56.5	46.2 46.2	8 9.5	20 9.5

Overall dimensions of counters  
«Beta-1», «Beta-2», «Beta-2M»



Overall dimensions of counters  
«Beta-1-1», «Beta-2-1», «Beta-2M-1»

