BASPIK
VLADIKAVKAZ
TECHNOLOGY CENTRE

SPECIFICATION

MICROCHANNEL PLATE WITH SOLID BORDER MCP 18-5

Microchannel Plate is intended for operation in vacuum inside Image Intensifier Tubes as a multi-channel secondary-electron multiplier of electron images.

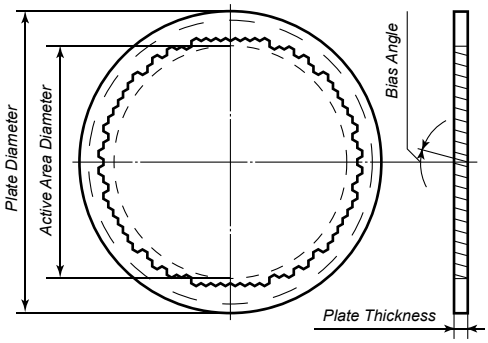
ALTERNATIVE SPECIFICATION MAY BE MADE ON CUSTOMER'S ORDER.

SIZE-SHAPE FACTORS

PARAMETER	DIMENSION	VALUE
Plate Diameter	mm	24.8
Active Area Diameter	mm	min. 18.6
Plate Thickness	mm	0.3
Channel Diameter	μm	5
Center-to-Center Spacing	μm	max. 7
Bias Angle	degree	6

ELECTRICAL & IMAGE CHARACTERISTICS

PARAMETER	DIMENSION	VALUE
Electron Gain at 850 V	-	1000
Resistance	x10 ^{8} Ohms	0.5 - 2.5
Minimum Limiting Resolution	lp/mm	90
Maximum Dark Current Density	$\times 10^{-14}$ A/cm ^{2}	1
Noise factor, typical value	-	1.6
Open Area Ratio	%	min. 59



MTTF *(mean time to failure) : not less than 15000 hrs.*

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	LIMITING VALUE
Operating Voltage	1000 V
Field Strength	14 KV/mm
Input Current Density	1×10^{-8} A/cm^{2}
Output Current Density	4×10^{-7} A/cm^{2}

VACUUM BAKEOUT LIMITING TEMPERATURE:

480°C during not more than 4 hrs. at 5×10^{-6} torr.

WARRANTIES

Shelf-life: *the MCP shall be stored in container provided by the manufacturer during 6 months, in vacuum (1.33×10^{-3} Pa) during 1 year or 15 years as a part of an image intensifier tube. The shelf-life is to be calculated from the acceptance date of manufacturer's quality inspection, and in a case of reacceptance from the reacceptance date.*

44/6 Nikolaev st., Vladikavkaz, 362021, post-box 323 ; RNO-Alania, Russia
tel. / fax: +7 (8672) 24-19-61; e-mail: market@baspik.com