

RADIATION HARD PHOTOMULTIPLIER TUBE PMT-187 OF HIGH IMMUNITY TO MAGNETIC FIELDS

Photomultiplier tube of PMT-187 series has bialkali photocathode and 15-cascade secondary-electronic amplifier with mesh dynodes. The device is intended for scintillation counting in high-energy physics and could be used under simultaneous exposure of strong magnetic and radioactive fields and elementary particles.



Construction design: PMT-187 is produced in a glass balloon with head-on input and rigid leads. The input window is made of boron-silicate UV glass, the first dynode is of "proximity" type. Possible complete set includes socket with voltage divider.

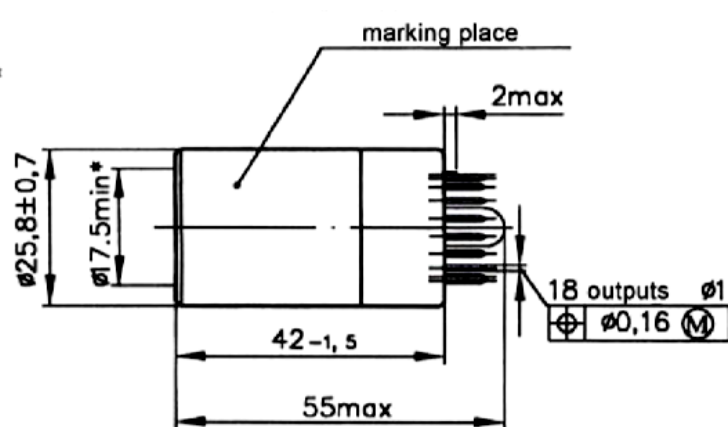
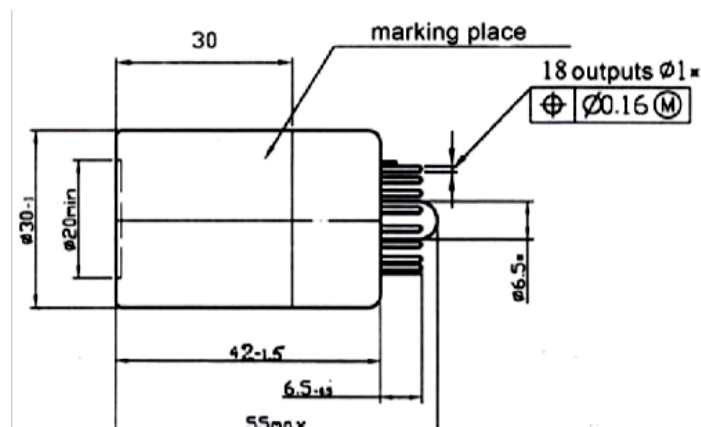
SPECIFICATIONS

	PMT-187	PMT-187-1
Photocathode	SbKCs	
Length, mm	55	
Diameter, mm	30	25.8
Photocathode diameter, mm	20	17.5
Dynodes, pcs.	15	
Spectral response, nm	220÷650	
Typ. photocathode luminous sensitivity, $\mu\text{A}/\text{lm}$	60	
Typ. photocathode radiant sensitivity ($\lambda=400\text{nm}$), mA/W	60	
Anode luminous sensitivity, A/lm	40	
Typ. supply voltage at anode luminous sensitivity of 30 A/lm , V	≤ 1800	

Dark current, A	$\leq 1 \cdot 10^{-8}$
Typ. gain under normal conditions	$5 \cdot 10^5$
Typ. gain under magnetic field of $H=0.5$ T	$2 \cdot 10^5$
Typ. pulse rise time, ns	1.4
Typ. energy resolution on $\text{NaI(Tl)}^{137}\text{Cs}$, %	10.1
Temperature range, °	$-60 \div +55$

PMT-187

PMT-187-1



SPECTRAL RESPONSE CHARACTERISTIC

