

# HAMAMATSU

## PRELIMINARY DATA SHEET

Nov. 2009

## PHOTOMULTIPLIER TUBE

# R11187

**Bialkali photocathode, 8 stages, Head-on Type, Metal channel dynode  
26mm (1 Inch) Square, High Pulse Linearity, High Speed Response**

### General

Parameter	Description	Unit
Spectral response range	300 to 650	nm
Wavelength of Maximum Response	420	nm
Window material	Borosilicate glass	-
Photocathode	Material	Bialkali
	Minimum Effective Area	18×18
Dynode structure	Metal channel dynode	-
Dynode stages	8	-
Weight	Approx 24	g
Operating Ambient Temperature	-30 to +50	deg C
Storage Temperature	-80 to +50	deg C
Suitable Socket	E678-32B(option)	-

### Maximum Ratings (Absolute Maximum Values)

Parameter	Value	Unit
Supply voltage Between Anode and Cathode	900	V dc
Average anode current	0.1	mA

### Characteristics at 25 deg C

Parameter	Min.	Typ.	Max.	Unit	
Cathode Sensitivity	Luminous (2856 K)	60	80	-	uA/lm
	Cathode Blue Index	7.0	9.5	-	-
Anode Sensitivity	Luminous (2856 K)	7	15	-	A/lm
Gain (Current Amplification)	-	$1.9 \times 10^5$	-	-	
Anode Dark Current (after 30min. storage in darkness)	-	0.2	2	nA	
Time Response	Anode Pulse Rise Time	-	1.5	-	ns
	Transit Time	-	7.0	-	ns
Pulse Linearity at $\pm 2$ % Deviation	-	80	-	mA	

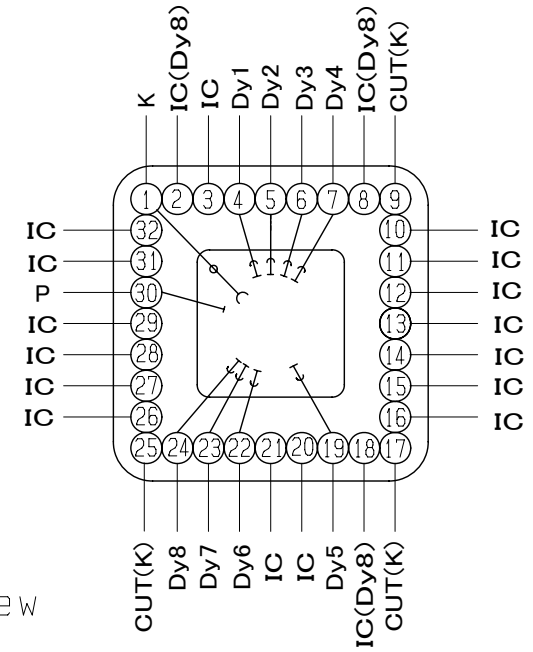
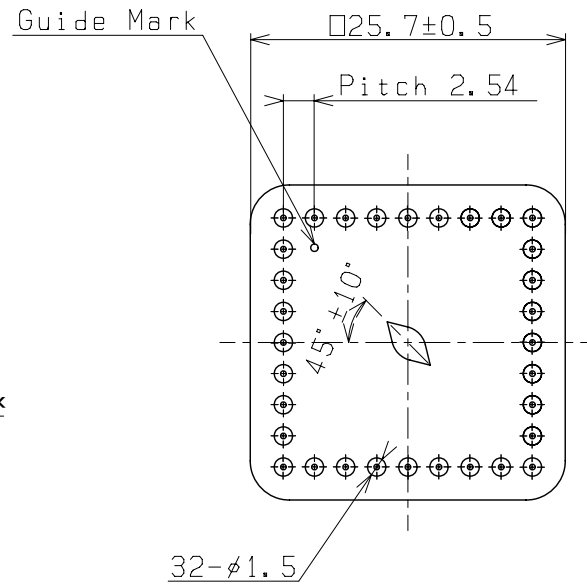
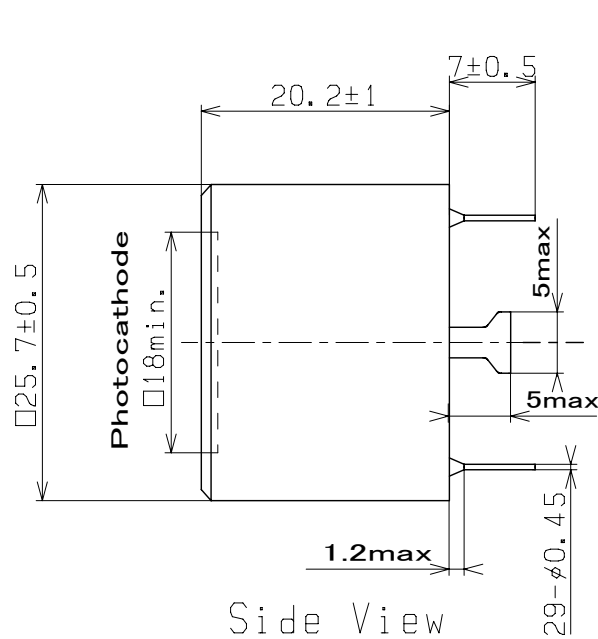
NOTE: Anode characteristics are measured with the voltage distribution ratio shown below

### Voltage Distribution Ratio and Supply Voltage

K	Dy1	Dy2	Dy3	Dy4	Dy5	Dy6	Dy7	Dy8	P
2	2	2	1	1	1	2	3	2	

Supply Voltage : 800 V    K : Cathode    Dy : Dynode    P : Anode

# R11187 Dimensional Outline



CUT:Cut Pin  
 IC:Internal Connection  
 (Do not use)

