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Find the *Hamamatsu R980-19* at our website: *Click HERE*

HAMAMATSU

TECHNICAL DATA SHEET
NOV. 2001

PHOTOMULTIPLIER TUBES
R980, R980-01

38 mm Diameter Photomultiplier Tubes
For Scintillation Counting, Gamma Camera
Bialkali Photocathode, 10 Stages, Head-on Type

GENERAL

Parameter		Description/Value	Unit
Spectral Response		300 to 650	nm
Wavelength of Maximum Response		420	nm
Photocathode	Material	Bialkali	—
	Minimum Effective Area	34	mm dia.
Window Material		Borosilicate glass	—
Dynode	Structure	Circular-cage	—
	Number of Stages	10	—
Base	R980	12-pin base JEDEC No. B12-43	—
	R980-01 (flying leads temporary base)	12-pin base JEDEC No. B12-43	—
Suitable Socket		E678-12A (supplied)	—

MAXIMUM RATINGS (Absolute Maximum Values)

Parameter		Value	Unit
Supply Voltage	Between Anode and Cathode	1250	V dc
	Between Anode and Last Dynode	250	V dc
Average Anode Current		0.1	mA
Ambient Temperature	R980	-30 to +50	°C
	R980-01	-80 to +50	°C

CHARACTERISTICS (at 25 °C)

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Luminous (2856 K)	70	100	—	μA/lm
	Radiant at 420 nm	—	90	—	mA/W
	Blue Sensitivity Index (CS 5-58)	9.0	11.5	—	—
Anode Sensitivity	Luminous (2856 K)	10	35	—	A/lm
	Radiant at 420 nm	—	3.3×10^4	—	A/W
Gain		—	3.7×10^5	—	—
Anode Dark Current (after 30 min storage in darkness)		—	3	5	nA
Time Response	Anode Pulse Rise Time	—	2.8	—	ns
	Electron Transit Time	—	40	—	ns

VOLTAGE DISTRIBUTION RATIO AND SUPPLY VOLTAGE

Electrodes	K	Dy1	Dy2	Dy3	Dy4	Dy5	Dy6	Dy7	Dy8	Dy9	Dy10	P
Ratio	2	1	1	1	1	1	1	1	1	1	1	

Supply Voltage: 1000 V dc, K: Cathode, Dy: Dynode, P: Anode

Subject to local technical requirements and regulations, availability of products included in this promotional material may vary. Please consult with our sales office.
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PHOTOMULTIPLIER TUBES R980, R980-01

Figure 1: Typical Spectral Response

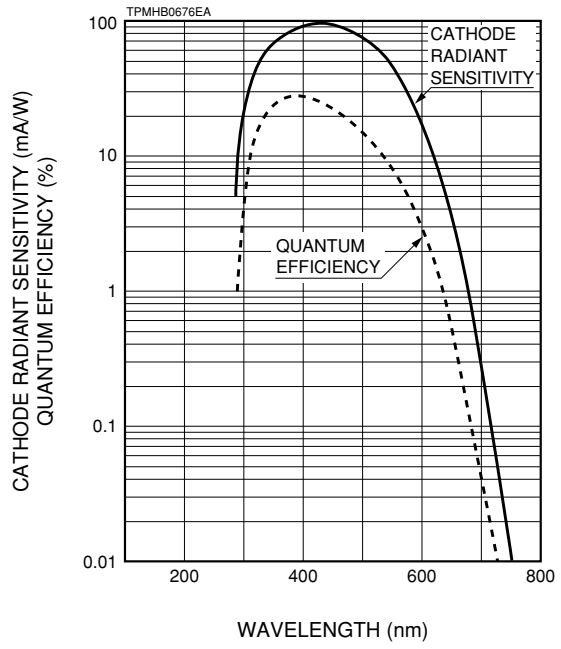


Figure 2: Typical Gain

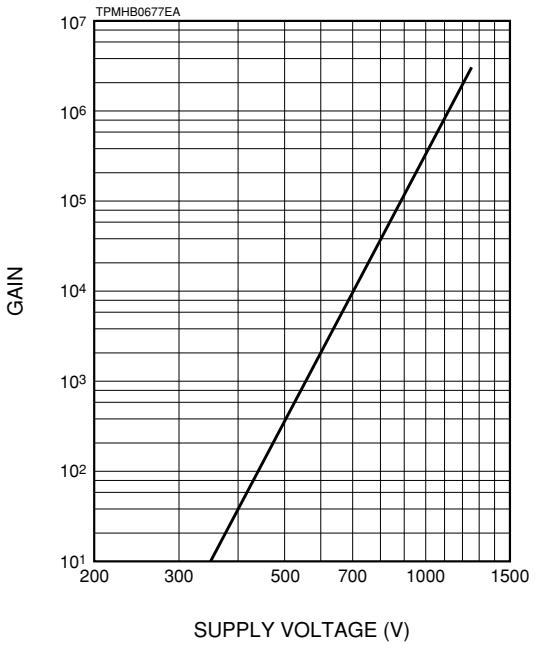
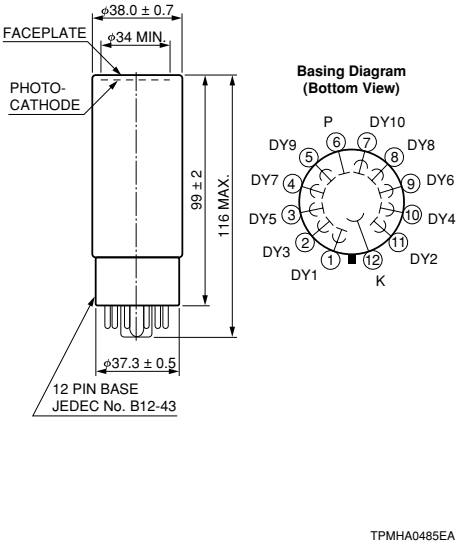
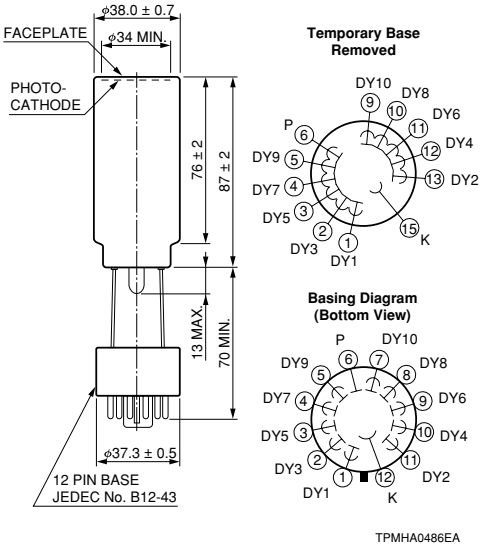


Figure 3: Dimensional Outline and Basing Diagram (Unit: mm)

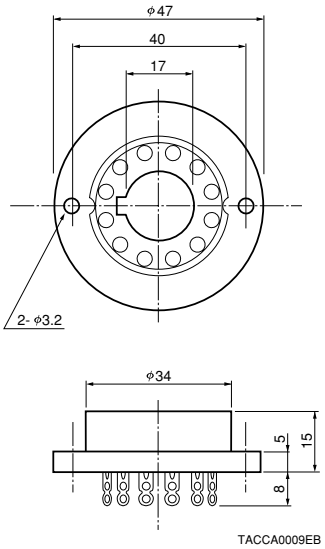
R980



R980-01



Socket (E678-12A)



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HAMAMATSU PHOTONICS K.K., Electron Tube Center
314-5, Shimokanzo, Toyooka-village, Iwata-gun, Shizuoka-ken, 438-0193, Japan, Telephone: (81)539/62-5248, Fax: (81)539/62-2205
U.S.A.: Hamamatsu Corporation: 360 Foothill Road, P. O. Box 6910, Bridgewater. N.J. 08807-0910, U.S.A., Telephone: (1)908-231-0960, Fax: (1)908-231-1218 E-mail: usa@hamamatsu.com
Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49)8152-375-0, Fax: (49)8152-2658 E-mail: info@hamamatsu.de
France: Hamamatsu Photonics France S.A.R.L.: 8, Rue du Saule Trapu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: (33)1 69 53 71 00, Fax: (33)1 69 53 71 10 E-mail: infos@hamamatsu.fr
United Kingdom: Hamamatsu Photonics UK Limited: 2 Howard Court, 10 Tewin Road Welwyn Garden City Hertfordshire AL7 1BW, United Kingdom, Telephone: 44-(0)1707-294888, Fax: 44(0)1707-325777 E-mail: info@hamamatsu.co.uk
North Europe: Hamamatsu Photonics Norden AB: Smidesvägen 12, SE-171-41 SOLNA, Sweden, Telephone: (46)8-509-031-00, Fax: (46)8-509-031-01 E-mail: info@hamamatsu.se
Italy: Hamamatsu Photonics Italia: S.R.L.: Strada della Moia, 1/E, 20020 Arese, (Milano), Italy, Telephone: (39)02-935 81 733, Fax: (39)02-935 81 741 E-mail: info@hamamatsu.it

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