

FEATURES

- For high temperature operation: Up to 175 °C
- Ruggedized, Low profile structure
Vibration: 300 m/s², Shock: 10 000 m/s², 43 mm in bulb length

APPLICATIONS

- Geological search (Oil well logging)

SPECIFICATIONS



GENERAL

Parameter		Description	Unit
Spectral response		300 to 650	nm
Wavelength of maximum response		375	nm
Photocathode	Material	High temp. bialkali	—
	Minimum effective area	φ22	mm
Window material		Borosilicate glass	—
Dynode	Structure	Circular and linear focused	—
	Number of stages	10	—
Operating ambient temperature		-30 to +175	°C
Storage temperature		-80 to +175	°C
Base configuration		Semiflexible lead temporary base	—
Suitable socket		E678-12R (supplied)	—

MAXIMUM RATINGS (Absolute maximum values)

Parameter		Value	Unit
Supply voltage	Between anode and cathode	1800	V
	Between anode and last dynode	250	V
Average anode current		0.02	mA

CHARACTERISTICS (at 25 °C)

Parameter		Min.	Typ.	Max.	Unit
Cathode sensitivity	Luminous (2856 K)	20	40	—	μA/lm
	Quantum efficiency at 375 nm	—	16.9	—	%
	Blue sensitivity index	4	6	—	—
Anode sensitivity	Luminous (2856 K)	8	20	—	A/lm
Gain		—	5.0 × 10 ⁵	—	—
Anode dark current (after 30 min storage in darkness)		—	0.1	10	nA
Time response	Anode pulse rise time	—	1.3	—	ns
	Electron transit time	—	13	—	ns

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

CHARACTERISTICS (at 175 °C)

Parameter	Min.	Typ.	Max.	Unit
Anode dark current (after 30 min storage in darkness)	—	400	—	nA

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

STANDARD VOLTAGE DIVIDER AND SUPPLY VOLTAGE

Electrodes	K	Dy1	Dy2	Dy3	Dy4	Dy5	Dy6	Dy7	Dy8	Dy9	Dy10	P
Ratio	3	1	1	1	1	1	1	1	1	1	1	1

Supply voltage: 1500 V, K: Cathode, Dy: Dynode, P: Anode

ENVIRONMENTAL TESTING

Shock.....10 000 m/s², 0.5 ms, 3 impact shocks per direction (6 directions)

Vibration.....300 m/s², 50 Hz to 2000 Hz, 1 octave per minute, 3 sweeps per axis (3 axes)

PHOTOMULTIPLIER TUBE R1288A

Figure 1: Typical spectral response

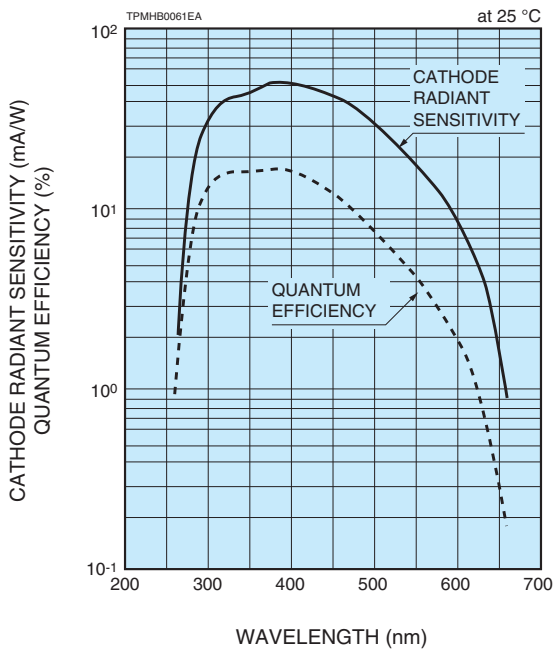


Figure 2: Typical gain characteristics

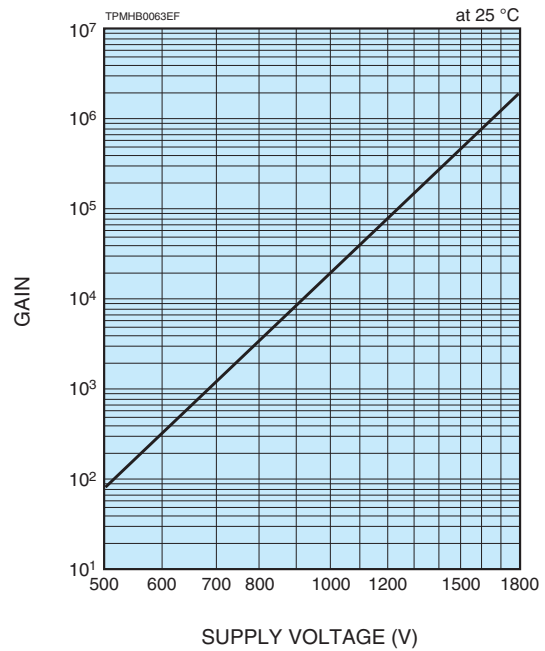
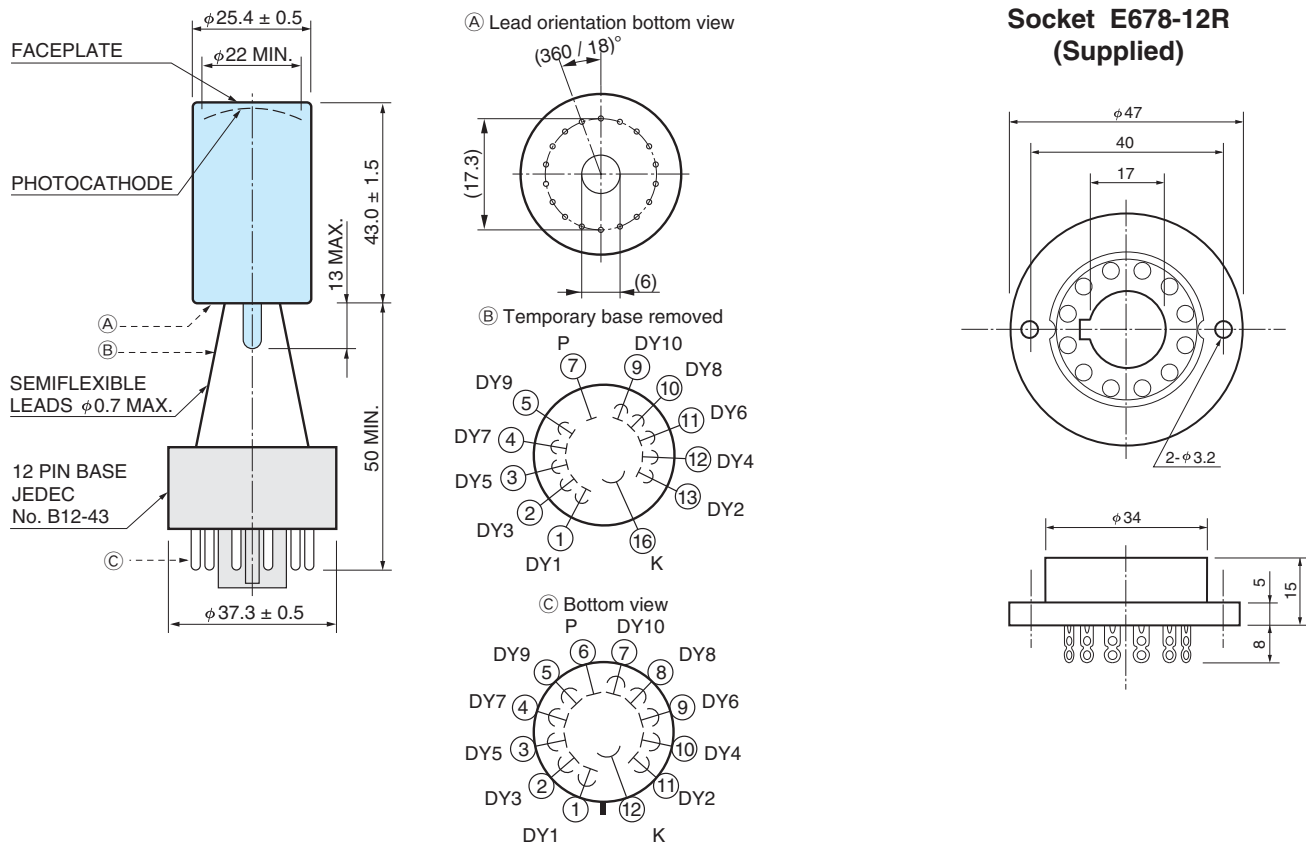
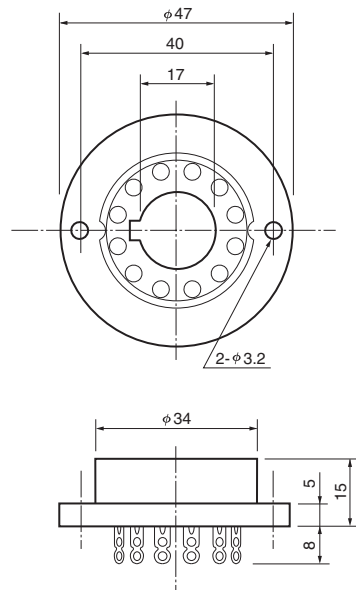


Figure 3: Dimensional outline and basing diagram (Unit: mm)



Socket E678-12R (Supplied)



TACCA0009EB

TPMHA0363EF

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