

MEASURING DIODE for frequencies up to 1000 Mc/s

HEATING

Indirect by A.C. or D.C.; series or parallel supply

Heater voltage $V_f = 6.3 \text{ V}$

Heater current $I_f = 300 \text{ mA}$

CAPACITANCE

Between anode and cathode $C_d < 0.5 \text{ pF}$

TYPICAL CHARACTERISTICS

Heater voltage $V_f = 6.3 \text{ V}$

Diode current $I_d = 0.5 \text{ mA}$

Diode voltage $V_d < 3 \text{ V}$

LIMITING VALUES (Absolute limits)

Peak inverse voltage

at frequencies lower than 100 Mc/s

$V_d \text{ invp} (f < 100 \text{ Mc/s}) = \text{max. } 1000 \text{ V}$

at frequencies higher than 100 Mc/s

$V_d \text{ invp} (f > 100 \text{ Mc/s}) = \text{max. } \frac{100}{f} \times 1000 \text{ V}^1)$

Cathode current (heater
voltage from 5.6 to 7.0
volts)

$I_k = \text{max. } 300 \text{ } \mu\text{A}$

Peak cathode current
(heater voltage from
5.6 to 7.0 volts)

$I_{kp} = \text{max. } 5 \text{ mA}^2)$

Voltage between heater
and cathode

$V_{kf} = \text{max. } 50 \text{ V}$

External resistance be-
tween heater and cathode

$R_{kf} = \text{max. } 20 \text{ k}\Omega$

Heater voltage

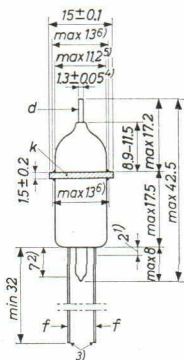
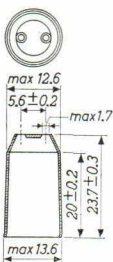
$V_f = \text{max. } 7.0 \text{ V}$
 $\quad \quad \quad = \text{min. } 5.6 \text{ V}$

¹⁾ f in Mc/s

²⁾ For frequencies lower than 100 c/s
 $I_{kp} = \text{max. } 0.3 + 0.047f \text{ mA} (f \text{ in c/s})$

EA52**PHILIPS**

→ Dimensions in mm

Protective cap

The temperature of the protective cap should not exceed 100 °C

In order to avoid strain, the connection to the cathode disc should be sufficiently flexible

For curves of the EA52 please refer to type EA53

- 1) This part of the leads should not be bent
 → 2) This part of the leads should not be soldered
 → 3) Gold plated leads, 0.4 mm diameter
 4) Eccentricity with respect to the cathode disc max. 0.25 mm
 → 5) Eccentricity with respect to the cathode disc max. 0.35 mm
 6) Maximum diameter of the glass seal