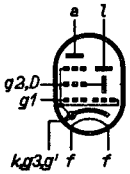
# PHILIPS

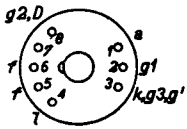
**EFM 11**

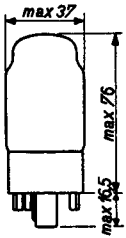
PENTODE for use as L.F. amplifier and tuning indicator
PENTHODE pour utilisation comme amplificatrice B.F. et indicatrice d'accord
PENTHODE zur Verwendung als N.F. Verstärker mit Abstimmanzeiger

Heating: indirect by A.C. or D.C.; parallel or series supply
Chauffage: indirect par C.A. ou C.C.; alimentation en parallèle ou en série; Vf = 6,3 V If = 0,200 A
Heizung: indirekt durch Gleich- oder Wechselstrom; Parallel- oder Serienspeisung

Dimensions in mm
Dimensions en mm
Abmessungen in mm




Capacities
Capacités
Kapazitäten

| | | |
|---|---|---|
| Ca | = | 6,6 pF |
| Cg1 | = | 6,4 pF |
| Cag1 | < | 0,7 pF |
| Cg1f | < | 0,12 pF |

# EFM 11 PHILIPS

Operating characteristics
Caractéristiques d'utilisation
Betriebsdaten

| | | | | |
|---|---|---|---|---|
| Vb=Vℓ | = | 250 | | V |
| Ra | = | 130 | | kΩ |
| Rg2 | = | 350 | | kΩ |
| Rk | = | 650 | | Ω |
| Va | = | 120 | 172 | V |
| Vg2 | = | 30 | 166 | V |
| Vg1 | = | -1,5 | -20 | V |
| Ia | = | 1,0 | 0,58 | mA |
| Ig2 | = | 0,63 | 0,26 | mA |
| Iℓ | = | 0,65 | 1 | mA |
| Ri | = | 0,7 | >3 | MΩ |
| Vo/Vi | = | 80 | 12 | |
| $d_{tot}$ ($Vo=5V_{eff}$) | = | 1,5 | 2 | % |
| $d_{tot}$ ($Vo=3V_{eff}$) | = | 1 | 1 | % |
| β | | 70° | 3° | |

Limiting values
Caractéristiques limites
Grenzdaten

| | | | |
|---|---|---|---|
| $Va_o$ | = max. | 550 | V |
| Va | = max. | 300 | V |
| Wa | = max. | 0,4 | W |
| $Vg2_o$ | = max. | 550 | V |
| Vg2 | = max. | 300 | V |
| Wg2 | = max. | 0,2 | W |
| $Vℓ_o$ | = max. | 550 | V |
| Vℓ | = max. | 300 | V |
| Vℓ | = min. | 150 | V |
| Ik | = max. | 4 | mA |
| Vg1 (Ig1=+0,3 μA) | = max. | -1,3 | V |
| Rg1 | = max. | 3 | MΩ |
| Rfk | = max. | 20 | kΩ |
| Vfk | = max. | 100 | V |

PHILIPS

Electronic Tube

HANDBOOK

**EFM11**

| page | sheet | date |
|---|---|---|
| 1 | 1 | 1948.09.16 |
| 2 | 2 | 1948.09.16 |
| 3 | FP | 1999.07.04 |