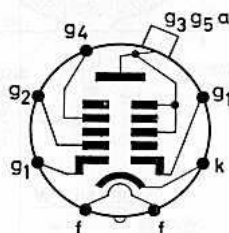


Black and White Picture Tubes

A 51-10 W

51 cm rectangular picture tube with 110° deflection angle, electrostatic focusing, aluminized screen and steel reinforcement including tube mount



1. Generalities

Electron Gun	Tetrode with Einzel-Lens
Bulb	All-Glass Type
Base	German Standard DIN 44431 (Short Design)
Focusing Method	Electrostatic
Deflection Method	Magnetic
Deflection Angles	Diagonal 110° Horizontal 99° Vertical 82°
Neck Diameter	28,6 mm
Face	Shape Spherical Material Filter-Glass (Light Transmission 49 % approx.)
Screen	Phosphor P 4 Aluminized
Fluorescence Colour	White
Colour Temperature	12 000 °K (approx.)
Minimum Useful	394 x 308 mm
Dimensions	Diagonal 473 mm
Overall Length	321,5 ± 6,5 mm
Weight	10 kg (approx.)

2. Typical Operating Conditions

U_f ②	6,3 V
I_f	0,3 ± 6% A
U_{g3g5a}	20 kV
U_{g2}	400 500 V
U_{g4} ③	0 ... 400 0 ... 400 V
$(-U_{g1})_{\text{cutoff}}$ ④	40 ... 77 50 ... 93 V
U_k cutoff ④	36 ... 66 45 ... 79 V

3. Maximum Ratings

$U_{g3g5a \text{ max}}$ ⑤	20 kV
$U_{g3g5a \text{ min}}$ ⑥	13 kV
$R_{g3g5a \text{ min}}$	16 kΩ
$U_{g4 \text{ max}}$	1000 V
$(-U_{g4}) \text{ max}$ ⑬	500 V
$I_{g4 \text{ max}}$	25 μA
$R_{g4 \text{ min}}$	470 Ω
$U_{g2 \text{ max}}$	550 V
$U_{g2 \text{ min}}$	350 V
$R_{g2 \text{ min}}$	470 Ω
$U_{g1 \text{ max}}$	0 V
$(-U_{g1}) \text{ max}$	150 V
$U_{g1 \text{ p max}}$	2 V
$(-U_{g1}) \text{ p max}$	400 V
$R_{g1 \text{ max}}$	1,5 MΩ
$Z_{g1 \text{ max}}$	0,5 MΩ
$R_{g1 \text{ min}}$	150 Ω
$P_{lm \text{ max}}$	10 mW/cm²
$U - f/k \text{ max}$ 1 ⑩ ⑨	410 V
$U - f/k \text{ max}$ 2 ⑩ ⑨	250 V
$U - f/k \text{ p max}$	300 V
$U + f/k \text{ max}$	135 V
$R_{f/k \text{ max}}$ ⑪	1,0 MΩ
$Z_{f/k \text{ max}}$ ⑫	0,1 MΩ

4. Capacitances

C_{g1}	approx. 6 pF
C_k	approx. 5 pF
$C_{g3g5a/m \text{ min}}$	1400 pF
$C_{g3g5a/m \text{ max}}$	2100 pF
$C_{g3g5a/m'}$	approx. 390 pF

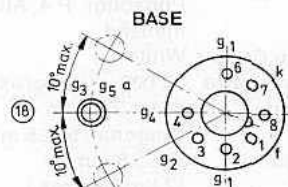
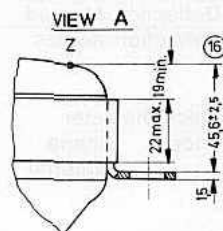
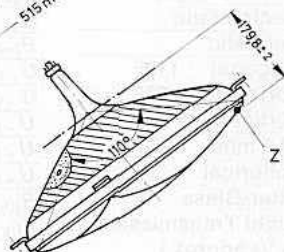
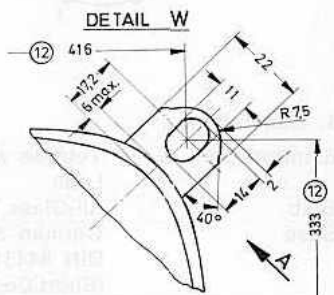
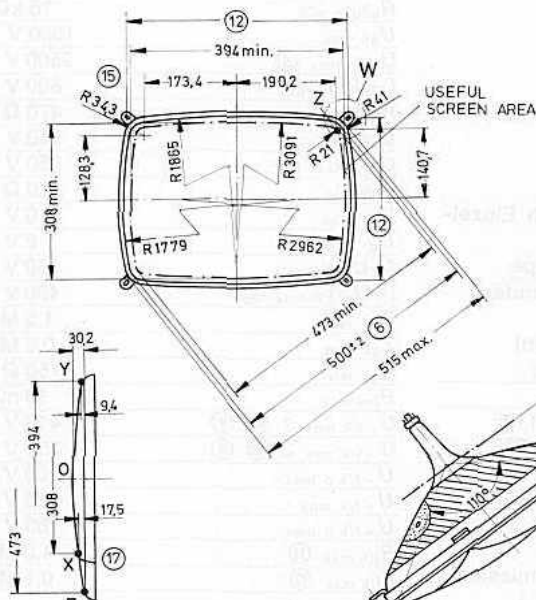
Implosion protection by steel reinforcement. Admitted by Association of German Electrical Engineers, VDE.

A 51—10 W

Technical drawings of two types of electronic components, showing dimensions and features.

Left Component (Spherical):

- Overall width: 4.37 max.
- Contact area: 0.50 min.
- Feature 6: 4.24, 8±2
- Feature 5: 2.10±.35
- Feature 4: 2.10±.35
- Feature 3: 2.10±.35
- Feature 2: 2.10±.35
- Feature 1: 2.10±.35
- Feature 0: 2.10±.35
- Feature 12: 1.2
- Feature 16: 1.6
- Feature 17: 1.7
- Feature 18: 1.8
- Feature 19: 1.9
- Feature 20: 2.0
- Feature 21: 2.1
- Feature 22: 2.2
- Feature 23: 2.3
- Feature 24: 2.4
- Feature 25: 2.5
- Feature 26: 2.6
- Feature 27: 2.7
- Feature 28: 2.8
- Feature 29: 2.9
- Feature 30: 3.0
- Feature 31: 3.1
- Feature 32: 3.2
- Feature 33: 3.3
- Feature 34: 3.4
- Feature 35: 3.5
- Feature 36: 3.6
- Feature 37: 3.7
- Feature 38: 3.8
- Feature 39: 3.9
- Feature 40: 4.0
- Feature 41: 4.1
- Feature 42: 4.2
- Feature 43: 4.3
- Feature 44: 4.4
- Feature 45: 4.5
- Feature 46: 4.6
- Feature 47: 4.7
- Feature 48: 4.8
- Feature 49: 4.9
- Feature 50: 5.0
- Feature 51: 5.1
- Feature 52: 5.2
- Feature 53: 5.3
- Feature 54: 5.4
- Feature 55: 5.5
- Feature 56: 5.6
- Feature 57: 5.7
- Feature 58: 5.8
- Feature 59: 5.9
- Feature 60: 6.0
- Feature 61: 6.1
- Feature 62: 6.2
- Feature 63: 6.3
- Feature 64: 6.4
- Feature 65: 6.5
- Feature 66: 6.6
- Feature 67: 6.7
- Feature 68: 6.8
- Feature 69: 6.9
- Feature 70: 7.0
- Feature 71: 7.1
- Feature 72: 7.2
- Feature 73: 7.3
- Feature 74: 7.4
- Feature 75: 7.5
- Feature 76: 7.6
- Feature 77: 7.7
- Feature 78: 7.8
- Feature 79: 7.9
- Feature 80: 8.0
- Feature 81: 8.1
- Feature 82: 8.2
- Feature 83: 8.3
- Feature 84: 8.4
- Feature 85: 8.5
- Feature 86: 8.6
- Feature 87: 8.7
- Feature 88: 8.8
- Feature 89: 8.9
- Feature 90: 9.0
- Feature 91: 9.1
- Feature 92: 9.2
- Feature 93: 9.3
- Feature 94: 9.4
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- Feature 96: 9.6
- Feature 97: 9.7
- Feature 98: 9.8
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- Feature 100: 10.0
- Feature 101: 10.1
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- Feature 109: 10.9
- Feature 110: 11.0
- Feature 111: 11.1
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- Feature 241: 24.1
- Feature 242: 24.2
- Feature 243: 24.3
- Feature 244: 24.4
- Feature 245: 24.



Reference line gauge see page 11