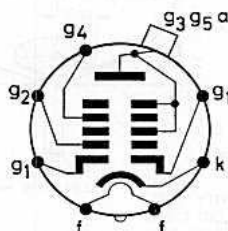


Black and White Picture Tubes

A 65-13 W

For Replacement

65 cm rectangular picture tube with 110° deflection angle, electrostatic focusing, aluminized screen and steel jacket 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 40 % approx.)
Screen	Phosphor P4 Aluminized
Fluorescence Colour	White
Colour Temperature	12 000 °K (approx.)
Minimum Useful Dimensions	530 x 416 mm Diagonal 616,5 mm
Overall Length	383 ± 8 mm
Weight	18 kg (approx.)

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

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
$(-U_{g1})$ cutoff ④	40 ... 77 50 ... 93 V

3. Maximum Ratings

U_{g3g5a} max ⑤	20 kV
U_{g3g5a} min ⑥	13 kV
R_{g3g5a} min	16 kΩ
U_{g4} max	1000 V
$(-U_{g4})$ max	500 V
U_{g4} p max ⑧	2500 V
I_{g4} max	25 μA
R_{g4} min	470 Ω
U_{g2} max	500 V
U_{g2} min	350 V
R_{g2} min	470 Ω
U_{g1} max	0 V
U_{g1} p max	2 V
$(-U_{g1})$ max	150 V
$(-U_{g1})$ p max ⑧	400 V
R_{g1} max	1,5 MΩ
Z_{g1} max	0,5 MΩ
R_{g1} min	150 Ω
P_{lm} max	10 mW/cm²
$U_{-f/k}$ max 1 ⑩ ⑨	410 V
$U_{-f/k}$ max 2 ⑩ ⑨	250 V
$U_{-f/k}$ p max	300 V
$U_{+f/k}$ max	135 V
$U_{+f/k}$ p max	180 V
$R_{f/k}$ max ⑪	1,0 MΩ
$Z_{f/k}$ max ⑫	0,1 MΩ

4. Capacitances

C_{g1}	approx. 6 pF
C_k	approx. 5 pF
$C_{g3g5a/m}$ max	2900 pF
$C_{g3g5a/m}$ min	1900 pF
$C_{g3g5a/m}$	approx. 600 pF

For Replacement

Top View:

- MOLD-MATCH LINE
- 578 max.
- 568 ± 2.5 (6)
- SPHERICAL
- R1115
- R720
- MAJOR AND MINOR AXIS
- 624
- 110° DIAGONAL
- 50 min.
- 383 ± 8
- 54 max.
- 28 ± 3
- 194 ± 3
- 2.73 ± 5
- REFERENCE LINE (2)
- CONTACT AREA
- φ 28.6 +1.07 -0.9 (4)

Side View:

- 469.5 max.
- 459 ± 2.5 (6)
- 5°
- R12
- 89 max.
- 15
- 56.2
- 50 min. (5)
- ANODE CAVITY CAP 792 DIN 41543 JEDEC J1-21 (1)
- BASE DIN 44431 (7 PINS; SHORT TYPE)
- φ 130 min.
- WITHOUT CONDUCTIVE COATING (3)

Bottom View:

- 581.5 max.
- 537 (13)
- 530 min.
- 4.73.5 max.
- 4.31 (13)
- 4.16 min.
- R1225
- R1670
- R47
- R2535
- R150
- R55
- R2510
- R50
- R32
- 150
- 180
- 155
- 235
- 375
- 218
- 616.5 min.
- 645 ± 2.5 (6)
- 653 max.
- 4.5 ± 3
- 12.8 ± 2
- 530
- 4.16
- 24.8 ± 2
- 616.5
- 17

DETAIL W:

- 4.3 max.
- 40
- 30
- 4.03
- R8
- R25
- 15
- ALL ROUND BARE METAL

SECTION A-B:

- 616.5
- 21.5 ± 1
- 2.5
- 15 min.
- 38.5 ± 2

BASE:

- 10° max.
- 10° max.
- g1, g2, g3, g4, g5, g6, g7, g8, g9, g10, g11, g12, g13, g14, g15, g16, g17, g18, g19, g20, g21, g22, g23, g24, g25, g26, g27, g28, g29, g30, g31, g32, g33, g34, g35, g36, g37, g38, g39, g40, g41, g42, g43, g44, g45, g46, g47, g48, g49, g50, g51, g52, g53, g54, g55, g56, g57, g58, g59, g60, g61, g62, g63, g64, g65, g66, g67, g68, g69, g70, g71, g72, g73, g74, g75, g76, g77, g78, g79, g80, g81, g82, g83, g84, g85, g86, g87, g88, g89, g90, g91, g92, g93, g94, g95, g96, g97, g98, g99, g100, g101, g102, g103, g104, g105, g106, g107, g108, g109, g110, g111, g112, g113, g114, g115, g116, g117, g118, g119, g120, g121, g122, g123, g124, g125, g126, g127, g128, g129, g130, g131, g132, g133, g134, g135, g136, g137, g138, g139, g140, g141, g142, g143, g144, g145, g146, g147, g148, g149, g150, g151, g152, g153, g154, g155, g156, g157, g158, g159, g160, g161, g162, g163, g164, g165, g166, g167, g168, g169, g170, g171, g172, g173, g174, g175, g176, g177, g178, g179, g180, g181, g182, g183, g184, g185, g186, g187, g188, g189, g190, g191, g192, g193, g194, g195, g196, g197, g198, g199, g200, g201, g202, g203, g204, g205, g206, g207, g208, g209, g210, g211, g212, g213, g214, g215, g216, g217, g218, g219, g220, g221, g222, g223, g224, g225, g226, g227, g228, g229, g230, g231, g232, g233, g234, g235, g236, g237, g238, g239, g240, g241, g242, g243, g244, g245, g246, g247, g248, g249, g250, g251, g252, g253, g254, g255, g256, g257, g258, g259, g260, g261, g262, g263, g264, g265, g266, g267, g268, g269, g270, g271, g272, g273, g274, g275, g276, g277, g278, g279, g280, g281, g282, g283, g284, g285, g286, g287, g288, g289, g290, g291, g292, g293, g294, g295, g296, g297, g298, g299, g300, g301, g302, g303, g304, g305, g306, g307, g308, g309, g310, g311, g312, g313, g314, g315, g316, g317, g318, g319, g320, g321, g322, g323, g324, g325, g326, g327, g328, g329, g330, g331, g332, g333, g334, g335, g336, g337, g338, g339, g340, g341, g342, g343, g344, g345, g346, g347, g348, g349, g350, g351, g352, g353, g354, g355, g356, g357, g358, g359, g360, g361, g362, g363, g364, g365, g366, g367, g368, g369, g370, g371, g372, g373, g374, g375, g376, g377, g378, g379, g380, g381, g382, g383, g384, g385, g386, g387, g388, g389, g390, g391, g392, g393, g394, g395, g396, g397, g398, g399, g400, g401, g402, g403, g404, g405, g406, g407, g408, g409, g410, g411, g412, g413, g414, g415, g416, g417, g418, g419, g420, g421, g422, g423, g424, g425, g426, g427, g428, g429, g430, g431, g432, g433, g434, g435, g436, g437, g438, g439, g440, g441, g442, g443, g444, g445, g446, g447, g448, g449, g450, g451, g452, g453, g454, g455, g456, g457, g458, g459, g460, g461, g462, g463, g464, g465, g466, g467, g468, g469, g470, g471, g472, g473, g474, g475, g476, g477, g478, g479, g480, g481, g482, g483, g484, g485, g486, g487, g488, g489, g490, g491, g492, g493, g494, g495, g496, g497, g498, g499, g500, g501, g502, g503, g504, g505, g506, g507, g508, g509, g510, g511, g512, g513, g514, g515, g516, g517, g518, g519, g520, g521, g522, g523, g524, g525, g526, g527, g528, g529, g530, g531, g532, g533, g534, g535, g536, g537, g538, g539, g540, g541, g542, g543, g544, g545, g546, g547, g548, g549, g550, g551, g552, g553, g554, g555, g556, g557, g558, g559, g560, g561, g562, g563, g564, g565, g566, g567, g568, g569, g570, g571, g572, g573, g574, g575, g576, g577, g578, g579, g580, g581, g582, g583, g584, g585, g586, g587, g588, g589, g590, g591, g592, g593, g594, g595, g596, g597, g598, g599, g600, g601, g602, g603, g604, g605, g606, g607, g608, g609, g610, g611, g612, g613, g614, g615, g616, g617, g618, g619, g620, g621, g622, g623, g624, g625, g626, g627, g628, g629, g630, g631, g632, g633, g634, g635, g636, g637, g638, g639, g640, g641, g642, g643, g644, g645, g646, g64

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