

Oscilloscope tube with 3 in. diameter screen

ECR 30

HEATER

V_h 4.0 V I_h 1.0 A

CAPACITANCES

Grid to all other electrodes	<20	$\mu\mu\text{F}$
Each X plate or each Y plate to all other electrodes	<15	$\mu\mu\text{F}$
One X plate to one Y plate	<3	$\mu\mu\text{F}$

LUMINESCENT COLOUR

Green—medium persistence

DEFLECTION

Electrostatic. The tube is primarily intended for symmetrical deflection

OPERATING CONDITIONS

$V_{a1}=V_{a3}$	800	V
V_{a2}	100 to 170	V
V_g	-1.0 to -18	V

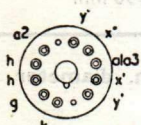
LIMITING VALUES

$V_{a1}=V_{a3}$ max.	1,000	V
V_{h-k} max.	50	V

DEFLECTION SENSITIVITY

X and Y plates	$\frac{170}{V_{a3}}$ mm/V
----------------	---------------------------

Viewed from the screen end and with the tube positioned so that spigot key of the base is uppermost, a positive voltage on X' will deflect the spot to the left and a positive voltage on Y' will deflect the spot upwards.



114

BASE :
B12B

DIMENSIONS :
L=206 mm
D=70 mm

High-sensitivity oscilloscope tube with 3½ in. diameter screen

ECR 35
ECR 35P

HEATER

V_h 4.0 V I_h 1.0 A

CAPACITANCES

Grid to all other electrodes	<25	$\mu\mu\text{F}$
Each X plate or each Y plate to all other electrodes	<25	$\mu\mu\text{F}$
One X plate to one Y plate	<5	$\mu\mu\text{F}$

LUMINESCENT COLOUR

ECR 35	Green—medium persistence
ECR 35P	Blue—with yellow-green afterglow; long persistence



4 VALVE DATA PREFERRED TYPES J OSCILLOSCOPE AND PICTURE TUBES

ECR 35 DEFLECTION

ECR 35P
(contd.)

Electrostatic. The tube is suitable for either symmetrical or asymmetrical deflection.

With asymmetrical deflection the trapezoidal distortion is such that the angle between adjacent sides of a 45 mm x 70 mm raster is between 85° and 95°.

OPERATING CONDITIONS

$V_{a1}=V_{a3}$	1,200	V
V_{a2}	150-250	V
V_g	-1.0 to -50	V

LIMITING VALUES

$V_{a1}=V_{a3}$ max.	2,500	V
V_{h-k} max.	50	V

DEFLECTION SENSITIVITY

X plates	$\frac{360}{V_{a3}}$ mm/V
Y plates	$\frac{780}{V_{a3}}$ mm/V

Viewed from the screen end and with the tube positioned so that the spigot key of the base is uppermost, a positive voltage on X' will deflect the spot to the left and a positive voltage on Y' will deflect the spot upwards.



BASE :
B12D

DIMENSIONS :
L=341 mm
D=90 mm

113

ECR 60 High-sensitivity oscilloscope tube with 6 in. diameter screen

HEATER

V_h 4.0 V I_h 1.0 A

CAPACITANCES

Grid to all other electrodes	<25	$\mu\mu\text{F}$
Each X plate or each Y plate to all other electrodes	<25	$\mu\mu\text{F}$
One X plate to one Y plate	<5	$\mu\mu\text{F}$

LUMINESCENT COLOUR

Green—medium persistence

DEFLECTION

Electrostatic. The tube is suitable for either symmetrical or asymmetrical deflection.

With asymmetrical deflection the trapezoidal distortion is such that the angle between adjacent sides of an 80 mm x 80 mm raster is between 85° and 95°.

