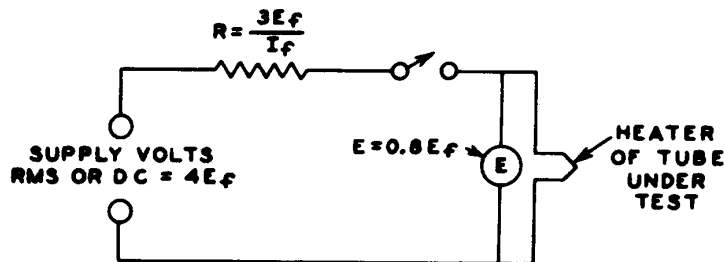




## HEATER WARM-UP TIME MEASUREMENT FOR TUBE TYPES INTENDED FOR USE IN SERIES HEATER-STRING ARRANGEMENT

Heater warm-up time is measured in the circuit shown below as follows: The heater is placed in series with a resistance having a value 3 times the heater operating resistance. A voltage having a value 4 times the rated heater voltage is then applied. Heater warm-up time is then defined as the time required for the voltage across the heater to reach 80 per cent of its rated value.

### TEST CIRCUIT FOR DETERMINING HEATER WARM-UP TIME



$E_f$  = RATED HEATER VOLTAGE OF TUBE UNDER TEST.  
 $I_f$  = RATED HEATER CURRENT OF TUBE UNDER TEST.

92CS-8503

MAR. 1, 1955

TUBE DIVISION  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

HEATER WARM-UP TIME  
MEASUREMENT