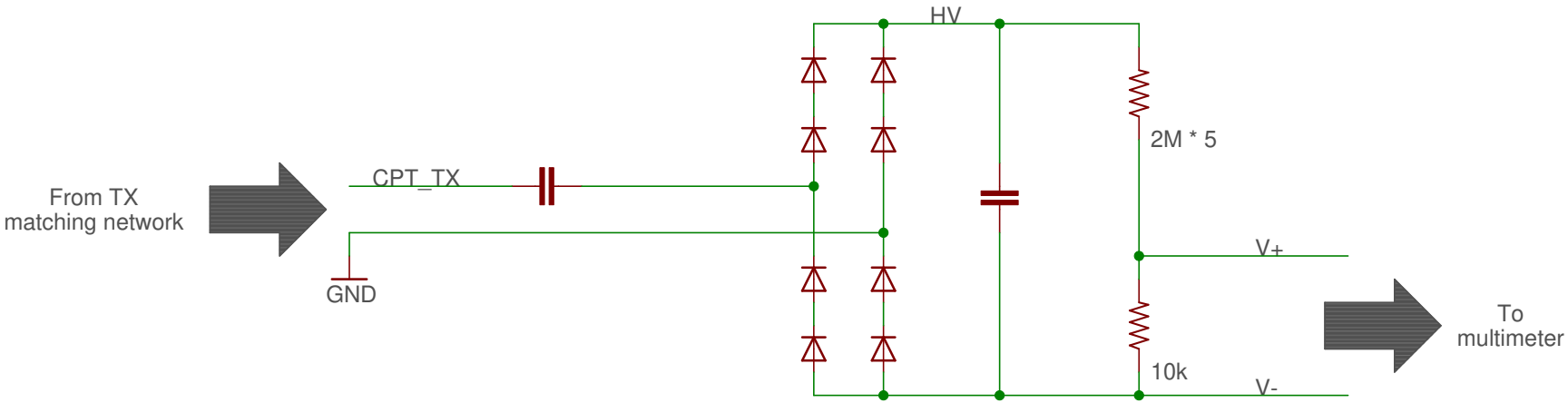
Diodes: use BYT54M fast rectifier rated at 1 kV.
The diode will likely limit measurement range.
With 2 BYT54M in series for each arm,
we have got 2.89 kV maximum peak voltage.

Capacitors: we used Murata DECE33J222ZC4B
which are 2.2 nF rated at 6 kV.
Similar capacitors should also work.
They are used for storage and DC-blocking.

NOTE:
1. The resistive divider must be placed after the rectifier.
Otherwise, resistors' parasitics and diodes' forwarding voltage
will severely distort the measurement results.
2. the storage capacitor must be put before the divider to
avoid long settling time.
3. Please observe the votage and power ratings of the resistors.
For typical axial resistors, the power rating is 1/4 W,
limiting voltage across a 2 Mohm resistor to approximately 700 V.
The divider here uses 5 in series, which allows a maximum voltage
of 3.5 kV and a dividing ratio of around 1000.



DO NOT CONNECT V- TO GND
KEEP MULTIMETER FLOATED
MAKE SURE MULTIMETER HAS GOOD ISOLATION
SAFETY MEASURES MUST BE IN PLACE