

Evaluating Starting Characteristics for Fluorescent Lamps

[Application]

Resistance measurement of fluctuating cathode current and filament

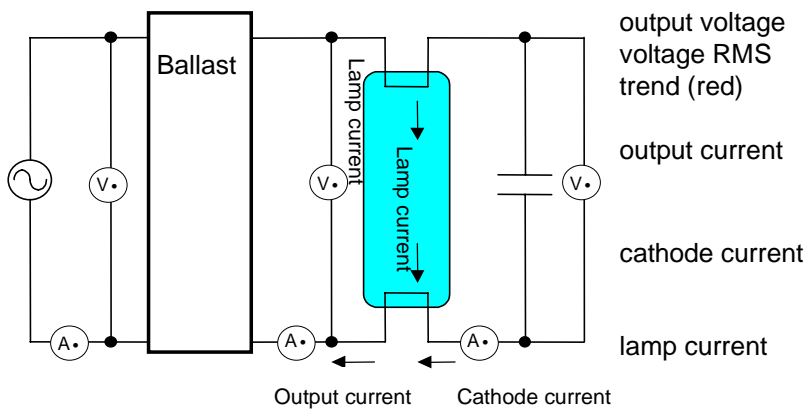
- Measuring averaging current from starting of fluctuating cathode current to lighting
- Measuring filament resistance values and calculating the heating loss

Calculation and display of lamp current

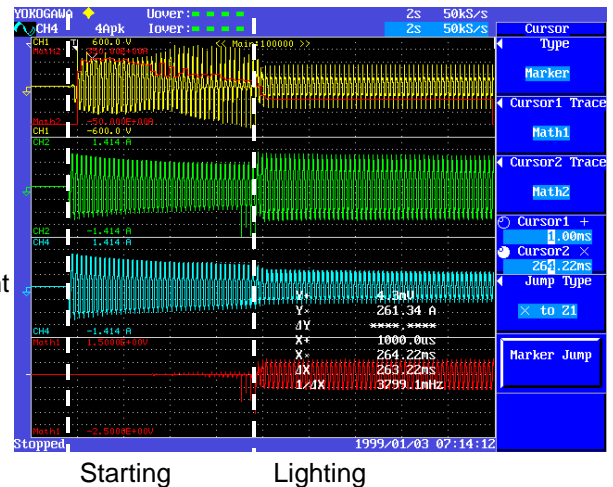
Lamp current = output current - cathode current

Display of RMS value trend

- Displaying RMS value for each 1 cycle
- Measuring maximum voltage at starting



Characteristics of lamp and ballast starting



[Solution Features]

#Performance required from the power meter

- Frequency range of 2 MHz - more than 10 times of 100kHz
- Combination of voltage probes and current probes usually requires amplitude and phase calibration. PZ4000 doesn't require such adjustment since all inputs can be made direct
- Strong characteristic against high frequency common mode voltage
- Measuring fluctuating transient input - determine period in input waveform to average
- Capturing one pattern of waveform with large amount of memory - 4MW/ch

#Benefits for the user

- The PZ4000 performs the functions of three instruments. Waveform observation, value display and harmonic measurements are performed in one instrument, saving the user test and evaluation time, cost and space for many instruments. The measuring results are highly reliable because the numeric calculations are based on the waveform data.
- You can input signals without using isolated amplifiers or current sensors. This reduces the error of such accessories.