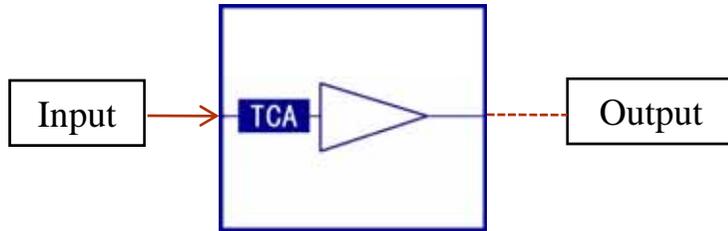
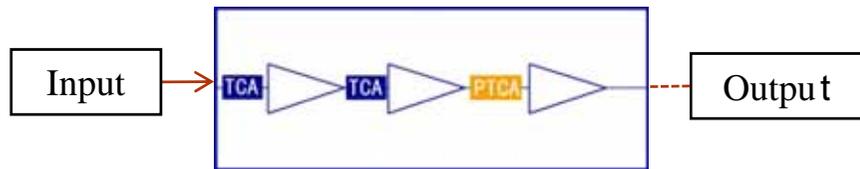


Yantel Solution

Apply TCA series to preceding stage of single Power Amplifier



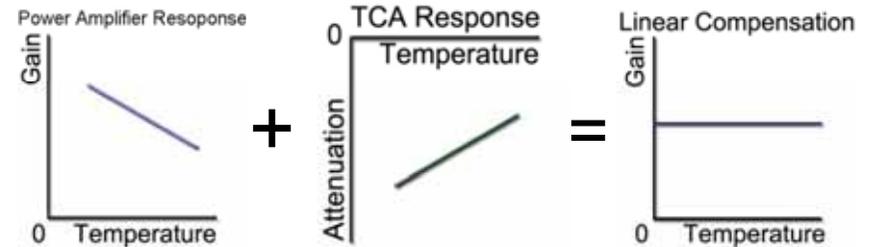
Apply PTCA series to penultimate stage of multi-stage power amplifier



Why PTCA series is needed in the penultimate stage?

1. As the power is very high in penultimate stage, a PTCA series is required for the high power input.
2. As the main heat source is found in the penultimate stage, a PTCA series can function for real time temperature characteristics correction.
3. PTCA series is isolation capable, can reduce mutual effect of multi power amplifier, either used in preceding stage or between multi-stages.

Response after Adding TCA Series (Linear Compensation)



As both the gain of power amplifier and TCA attenuation have negative slopes against temperature, a linear compensation can be realized and keep the output stable.

Advantages of TCA series :

1. When disposed in penultimate stage, it can sense the temperature change directly and thus facilitate real time temperature characteristics correction.
2. When used in multi-power amplifier, the isolation function can prevent self- oscillation
3. TCA series is of passive nature, with no distortion, no phase shift nor time delay.
4. No need for AGC loop and simplify power amplifier design, easy for system updating and reducing implicit cost.