As per equation 5,

$θsh=\left(\frac{Tmax-Tmax\\_pwr100\%}{Power Rating}\right)$=$\left(\frac{155°C-70°C}{0.25W}\right)$=340°C/W

As per equation 3,

𝚫Tsh =$ θsh×P=\frac{340°C}{W}×0.25W=85°C$

As per equation 1,

𝚫Rtc = ±Ro$×\left(\frac{ΔT×TC}{1000,000ppm}\right) $= ±62 Ω × $\left(\frac{(125°C-20°C)×\left(\frac{100ppm}{°C}\right)}{1000,000ppm}\right)$ = ±0.651Ω

As per equation 4,

𝚫Rtc\_sh = ±62 Ω × $\left(\frac{(85°C)×\left(\frac{100ppm}{°C}\right)}{1000,000ppm}\right)$ = ±0.527 Ω

So at 125°C does the total effective resistance becomes

62 Ω+0.651Ω+0.527 Ω = 63.178 Ω ?

My second question is in order to get the resistance change in negative temperature for example at -40°C

𝚫Rtc = ±Ro$×\left(\frac{ΔT×TC}{1000,000ppm}\right) $= ±62 Ω × $\left(\frac{(-40°C-20°C)×\left(\frac{100ppm}{°C}\right)}{1000,000ppm}\right)$ =

-0.372Ω

Hence at the -40°C does the total effective resistance becomes

62Ω+0.527Ω-0.372Ω = 62.155 ?

Note-----I have considered the 20°C as the reference temperature.