$V_{RMS} = 17V$ $\quad I_{RMS} = 3A$, $I_{PK} = 4.24 A_{PK}$

$V_{PK-PK} = 48.0 V_{PP}$, $24 V_P$

OPA549

$I_O = 2A$ $\quad (V+) - 3.2V$ min $\quad (V+) - 2.7V$ typ

$I_O = -2A$ $\quad (V-) + 1.7V$ min $\quad (V-) + 1.4V$ typ

$I_O = 8A$ $\quad (V+) - 4.8V$ min $\quad (V+) - 4.3V$ typ

$I_O = -8A$ $\quad (V-) + 4.6V$ min $\quad (V-) + 3.9V$ typ

$T_J = T_A + \Theta_{JA} \cdot P_d$ $\quad P_d = 60W$ $\quad \Theta_{JC} = 1.4°C/W$

$\frac{T_J - T_A}{P_d} = \Theta_{JA}$ & $\Theta_{JA} = \Theta_{JC} + \Theta_{C-hs} + \Theta_{hs-a}$

thermal shutdown temp ≈ 160°C

Set $T_{JMAX} = 150°C$, let $T_A = 25°C$

$$\Theta_{JA} = \frac{T_J - T_A}{P_d} = \frac{150°C - 25°C}{60W} = \frac{125°C}{60W} = 2.08 °C/W$$

$\Theta_{JC} = 1.4°C/W$, Let Θ_{C-hs} $0.5°C/W$

$$\Theta_{hs-a} = \Theta_{JA} - (\Theta_{JC} + \Theta_{C-hs})$$

$$= 2.08°C/W - (1.4°C/W + 0.5°C/W)$$

$$= 0.18°C/W$$

TEK

09-18-17