

EPC2037 Thermal Model

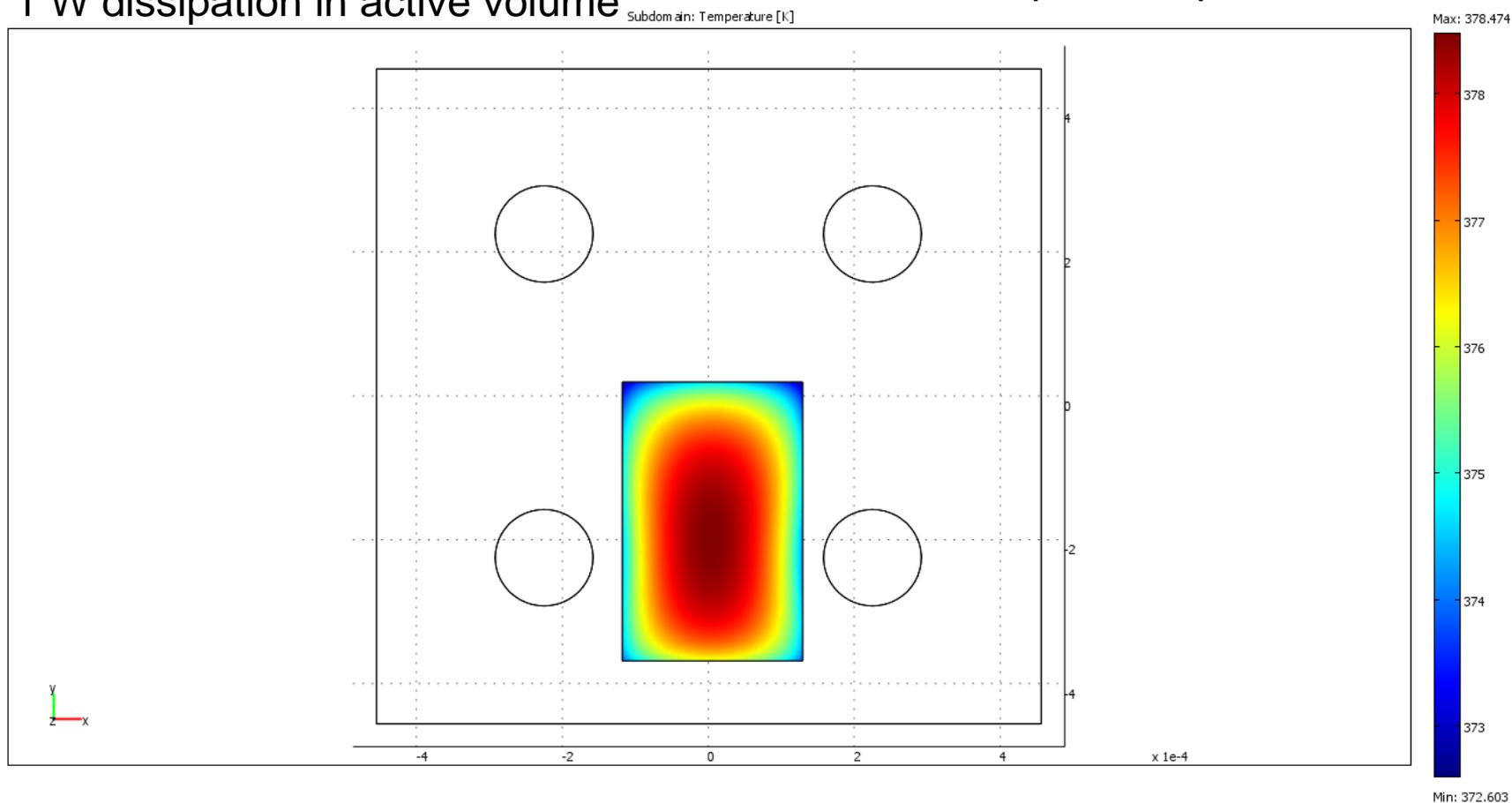
$R_{\theta JB}$ & $R_{\theta JC}$

Steady State $R_{\theta JB}$

$$R_{\theta JB} = 78.5 \text{ } ^\circ \text{ C/W}$$

1 W dissipation in active volume

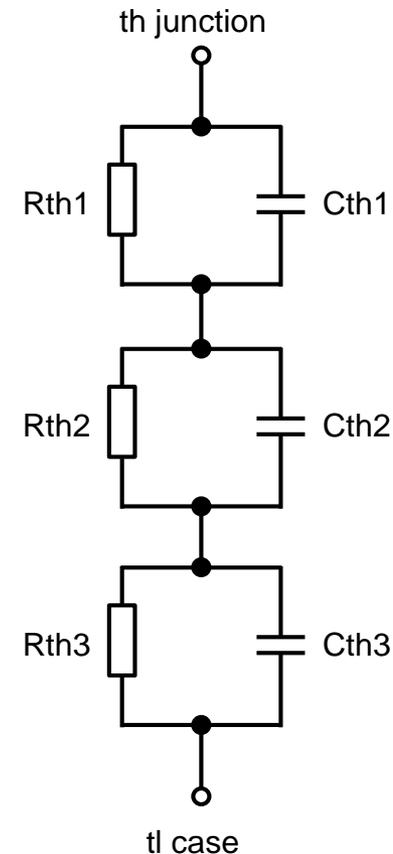
Top of bumps at 300K



Transient $R_{\theta JB}$

Transient junction temperature as a function of time under 1W load

Fitting parameter	Value	Unit
Rth1	78.3	° C/W
Rth2	1.19E-1	
Rth3	8.37E-2	
Cth1	1.34E-3	J/° C
Cth2	2.78E-3	
Cth3	1.4E-3	

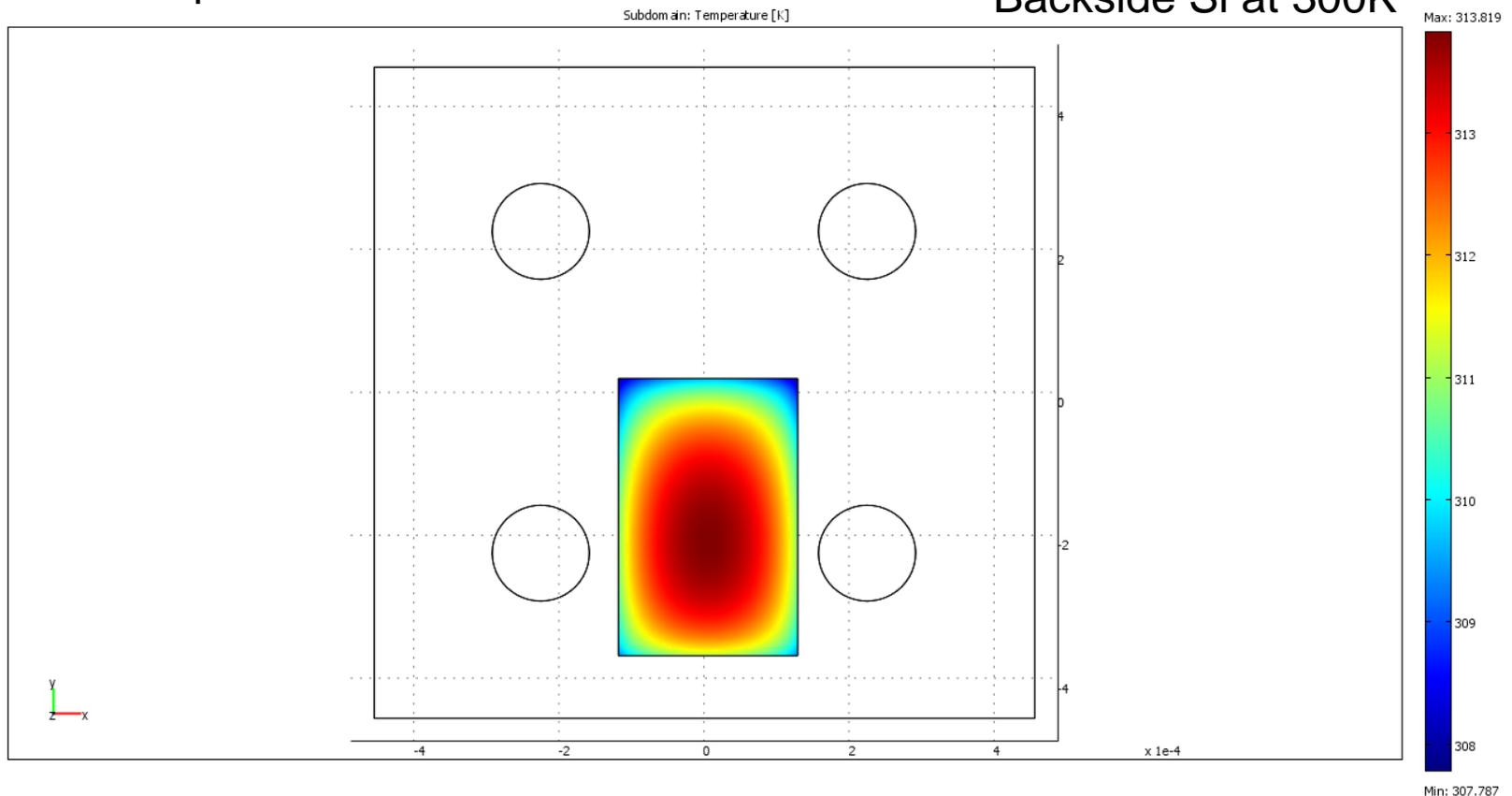


Steady State $R_{\theta JC}$

$$R_{\theta JC} = 13.8 \text{ } ^\circ \text{ C/W}$$

1 W dissipation in active volume

Backside Si at 300K



Transient $R_{\theta JC}$

Transient junction temperature as a function of time under 1W load

Fitting parameter	Value	Unit
Rth1	8.71	° C/W
Rth2	5.05	
Rth3	4.05E-2	
Cth1	7.34E-4	J/° C
Cth2	1.71E-4	
Cth3	3.03E-4	

