

Thermal RC network (Foster)

SPICE thermal model

| Symbol | Parameter | Conditions | Min | Тур | Max | Unit |
|-----------------------|---|-------------|-----|----------|--|------|
| ₹ _{th(j-mb)} | thermal resistance from junction to mounting base | | - | - | 2.00 | K/W |
| | | | | | | |
| | Cth ₁ | 1.858E-05 F | | Ą | 4. | |
| | Cth ₂ | 8.466E-05 F | | _ | <u> </u> | |
| | Cth ₃ | 2.486E-04 F | | | | |
| | Cth ₄ | 1.014E-03 F | | | | |
| | Cth ₅ | 2.305E-03 F | | | $\int Rth_1 + Cth_2$ | 1 |
| | Cth ₆ | 1.614E-02 F | | | | |
| | Cth ₇ | 6.607E-02 F | | г | ۲ • − 1 | |
| | Cth ₈ | 1.199E+01 F | | | $\int Rth_2 + Cth_2$ | 2 |
| | Rth₁ | 5.097E-03 Ω | | | | |
| | Rth ₂ | 1.228E-02 Ω | | _ _ г | | |
| | Rth ₃ | 3.904E-02 Ω | | | | 3 |
| | Rth ₄ | 1.089E-01 Ω | | | ┎ | |
| | Rth₅ | 3.852E-01 Ω | | | <u></u> | |
| | Rth ₆ | 7.032E-01 Ω | | | Rth4 📥 Cth | 4 |
| | Rth ₇ | 7.333E-01 Ω | | | | + |
| | Rth ₈ | 1.295Ε-02 Ω | (| Р | | |
| | | | | Ţ | | 5 |
| | | | | | | |
| | | | | | | 8 |
| | | | | l | ┘╺╶┬╴╴┈ | 0 |
| | | | | [| | |
| | | | | l | Rth7 📥 Cth | 7 |
| Part: | PSMN5R0-30YL | | | ſ | | |
| Date: | 18/11/2015 | | | | $\int Rth_8 \stackrel{\bullet}{=} Cth_8$ | В |
| Nodel Rth | 2.00 K/W | | | | | |
| | | | | | t _{amb} | |
| | | | | \vee | 001aal76 | 8 |

www.nxp.com

© 2009 NXP B.V.

All rights reserved. Reproduction in whole or in part is prohibited without prior consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of it's use. Publication thereof does not convey or imply any license under patent- or other industrial or intellectual property rights.