ne<mark>x</mark>peria

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If you have any questions related to the data sheet, please contact our nearest sales office via e-mail or telephone (details via **salesaddresses@nexperia.com**). Thank you for your cooperation and understanding,

Kind regards,

Team Nexperia



Thermal RC network (Foster)

SPICE thermal model

Bright in the main resistance transmission to mounting base 1.56 Cth, 4.740E-05 F Cth, 2.573E-04 F Cth, 9.672E-04 F Cth, 9.672E-04 F Cth, 9.672E-04 F Cth, 9.672E-04 F Cth, 2.798E-03 F Cth, 7.463E-03 F Cth, 7.463E-03 F Cth, 7.463E-03 F Cth, 3.781E-01 F Rth, 3.886E-02 Ω Rth, 3.886E-02 Ω Rth, 3.888E-01 Ω Rth, 3.888E-01 Ω Rth, 3.884E-01 Ω Rth, 5.360E-03 Ω Rth, 5.360E-03 Ω	Conditions Min Typ Max U	Conditions	Parameter	ymbol
Part: BUK7514-80E	1.56 K/		from junction to	th(j-mb)
Cth ₂ 3.573E-04 F Cth ₃ 2.573E-04 F Cth ₄ 9.872E-04 F Cth ₅ 2.798E-03 F Cth ₅ 2.798E-03 F Cth ₇ 2.716E-01 F Cth ₆ 3.781E+01 F Rth ₇ 3.454E-03 Ω Rth ₂ 3.454E-03 Ω Rth ₃ 3.886E-02 Ω Rth ₄ 1.014E-01 Ω Rth ₆ 8.981E-01 Ω Rth ₇ 1.681E-01 Ω Rth ₈ 5.350E-03 Ω P Rth ₇ th_{8}				
Cho 2.573E-04 F Cho 2.573E-04 F Cho 2.738E-03 F Cho 7.463E-03 F Cho 2.715E-01 F Cho 3.781E+01 F Rth_1 1.715E-03 Ω Rth_2 3.454E-03 Ω Rth_3 3.886E-02 Ω Rth_3 3.814E-01 Ω Rth_6 5.350E-03 Ω Part: BUK7514-60E		4.740E-05 F	Cth ₁	
Ch4, 9.872E-04 F Ch5, 2.798E-03 F Ch6, 7.463E-03 F Ch7, 2.715E-01 F Ch6, 3.781E+01 F Rth1, 1.715E-03 Ω Rth2, 3.468E-02 Ω Rth3, 3.888E-02 Ω Rth4, 1.014E-01 Ω Rth5, 3.814E-01 Ω Rth7, 1.681E-01 Ω Rth6, 5.350E-03 Ω P Rth6, Rth6, Cit Rth5, Cit Rth6, Cit Rth7, 1.681E-01 Ω Rth7, 1.681E-01 Ω Rth6, 5.350E-03 Ω	3.573E-04 F	3.573E-04 F	Cth ₂	
Cth ₉ 2.798E-03 F Cth ₉ 7.463E-03 F Cth ₉ 3.781E+01 F Rth ₁ 1.715E-03 Ω Rth ₂ 3.454E-03 Ω Rth ₃ 3.886E-02 Ω Rth ₃ 3.886E-02 Ω Rth ₃ 3.886E-02 Ω Rth ₃ 3.886E-02 Ω Rth ₃ 3.84E-01 Ω Rth ₃ 3.84E-01 Ω Rth ₃ 5.350E-03 Ω P Rth ₅ ⊂ Cth ₁ Rth ₃ Cth ₁ Rth ₂ Cth ₂ Rth ₂ Cth ₂ Rth ₂ Cth ₂ <td< td=""><td>2.573E-04 F</td><td>2.573E-04 F</td><td>Cth₃</td><td></td></td<>	2.573E-04 F	2.573E-04 F	Cth ₃	
cuis 2.7362-03 F Cthe 7.4632-03 F Cthy 2.7152-01 F Cthe 3.781E+01 F Rth 1.715E-03 Ω Rth 3.454E-03 Ω Rth 3.454E-03 Ω Rth 3.886E-02 Ω Rth 3.845E-01 Ω Rth 5.350E-03 Ω P Rths Rths 5.350E-03 Ω	9.872E-04 F	9.872E-04 F	Cth ₄	
Cthy 2.715E-01 F Cthg 3.781E+01 F Rth1 1.715E-03 Ω Rth2 3.454E-03 Ω Rth3 3.886E-02 Ω Rth4 1.014E-01 Ω Rth5 3.814E-01 Ω Rth6 8.981E-01 Ω Rth6 5.350E-03 Ω P Rth6 Rth6 Cth7 Rth7 1.681E-01 Ω Rth6 5.350E-03 Ω P Rth6 Rth7 1.681E-01 Ω Rth6 Cth7 Rth7 1.681E-01 Ω Rth7 Cth7 Rth7 Cth7 Rth6 Cth7 Rth7 Cth7	2.798E-03 F	2.798E-03 F	Cth ₅	
Cth ₉ 3.781E+01 F Rth ₁ 1.715E-03 Ω Rth ₂ 3.454E-03 Ω Rth ₃ 3.886E-02 Ω Rth ₄ 1.014E-01 Ω Rth ₅ 3.814E-01 Ω Rth ₇ 1.681E-01 Ω Rth ₈ 5.350E-03 Ω P Rth ₆ C Rth ₉ 5.350E-03 Ω	7.463E-03 F	7.463E-03 F	Cth ₆	
Part: BUK7514-60E	2.715E-01 F	2.715E-01 F	Cth ₇	
Part: BUK7514-60E	3.781E+01 F Rth2 + Cth2	3.781E+01 F	Cth ₈	
Part: BUK7514-60E Rth ₃ $3.886E-02 \Omega$ Rth ₄ $1.014E-01 \Omega$ Rth ₈ $3.814E-01 \Omega$ Rth ₇ $1.681E-01 \Omega$ Rth ₈ $5.350E-03 \Omega$ P Rth ₈ Cl Rth ₄ Cl Rth ₄ Cl Rth ₄ Cl Rth ₄ Cl Rth ₅ Cl Rth ₅ Cl Rth ₆ Cl Rth ₆ Cl Rth ₇ \Cl Cl Rth ₇ \Cl	1.715Ε-03 Ω	1.715E-03 Ω	Rth₁	
Part: BUK7514-60E		3.454E-03 Ω	Rth ₂	
$Rth_{8} \qquad 3.814E-01 \ \Omega$ $Rth_{8} \qquad 8.981E-01 \ \Omega$ $Rth_{7} \qquad 1.681E-01 \ \Omega$ $Rth_{8} \qquad 5.350E-03 \ \Omega$ P $Rth_{5} = Ct$ $Rth_{6} = Ct$ $Rth_{7} = Ct$ $Rth_{7} = Ct$ $Rth_{7} = Ct$ $Rth_{7} = Ct$	3.886E-02 Ω Rth3 = Cth3	3.886E-02 Ω	Rth ₃	
$Rth_{6} = 8.981E-01 \Omega$ $Rth_{7} = 1.681E-01 \Omega$ $Rth_{8} = 5.350E-03 \Omega$ $Rth_{6} = Ct$ $Rth_{6} = Ct$ $Rth_{7} = Ct$ $Rth_{7} = Ct$ $Rth_{7} = Ct$	1.014E-01 Ω	1.014E-01 Ω	Rth ₄	
$Rth_{7} 1.681E-01 \Omega$ $Rth_{8} 5.350E-03 \Omega$ P $Rth_{5} C I$ $Rth_{6} C I$ $Rth_{7} C I$	3.814E-01 Ω	3.814E-01 Ω	Rth₅	
$Rth_{7} 1.681E-01 \Omega$ $Rth_{8} 5.350E-03 \Omega$ P $Rth_{5} C d$ $Rth_{6} C d$ $Rth_{7} C d$	8.981E-01 Ω	8.981E-01 Ω	Rth ₆	
Part: BUK7514-60E		1.681E-01 Ω	Rth ₇	
Part: BUK7514-60E Rth8 \leftarrow Cf	5.350E-03 Ω P	5.350E-03 Ω	Rth ₈	
Part: BUK7514-60E				
art: BUK7514-60E				
Part: BUK7514-60E	$\square Rth_6 \stackrel{\checkmark}{=} Cth_6$			
Part: BUK7514-60E				
Date: 17/4/2013			BUK7514-60E	'art:
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