

## Thermal RC network (Foster)

## **SPICE thermal model**

BUK7M42-60E

thermal resistance			Тур		
from junction to mounting base		-	-	4.17	K/W
Cth <sub>1</sub>	9.782E-06 F		$\triangle$	4	
Cth <sub>2</sub>	9.797E-05 F			<u>'ij</u>	
Cth <sub>3</sub>	5.849E-05 F				
Cth <sub>4</sub>	1.642E-03 F				_
Cth <sub>5</sub>	4.431E-04 F				1
Cth <sub>6</sub>	4.924E-03 F				
Cth <sub>7</sub>	7.792E-02 F			<b>←</b>	
Cth <sub>8</sub>	6.763E+01 F			Rth <sub>2</sub> + Cth	2
Rth₁	6.862E-03 Ω				
				5	
				Rth3 = Cth	3
	7.651E-02 Ω		'	┸╇┛	
	1.956E+00 Ω				
Rth <sub>6</sub>	1.631E+00 Ω			$\bigcap_{Rth_{A}} \perp_{Cth}$	4
Rth <sub>7</sub>	3.775E-01 Ω			J ***** <b>T</b> ****	4
Rth <sub>8</sub>	5.465E-03 Ω	(	( P )		
			$\bigvee$ ,	7	
				Rth5 + Cth	5
				┖-•	
				$ _{Rth_{6}} \perp_{Cth}$	6
			l	丿 <b>、</b>	O
			] [	<u>ጎ</u>	
				Rth7 = Cth	7
			'	┖╋┦	
BLIK7M42-60F					
DOIN 10172-00L				Rths LCth	Ω
3/3/2016			l l	<b></b>	U
				t <sub>amb</sub>	
			<b>V</b>		8
	Cth <sub>1</sub> Cth <sub>2</sub> Cth <sub>3</sub> Cth <sub>4</sub> Cth <sub>5</sub> Cth <sub>6</sub> Cth <sub>7</sub> Cth <sub>8</sub> Rth <sub>1</sub> Rth <sub>2</sub> Rth <sub>3</sub> Rth <sub>4</sub> Rth <sub>5</sub> Rth <sub>6</sub> Rth <sub>7</sub> Rth <sub>8</sub>	Cth <sub>1</sub> 9.782E-06 F Cth <sub>2</sub> 9.797E-05 F Cth <sub>3</sub> 5.849E-05 F Cth <sub>4</sub> 1.642E-03 F Cth <sub>5</sub> 4.431E-04 F Cth <sub>6</sub> 4.924E-03 F Cth <sub>7</sub> 7.792E-02 F Cth <sub>8</sub> 6.763E+01 F  Rth <sub>1</sub> 6.862E-03 Ω Rth <sub>2</sub> 1.289E-02 Ω Rth <sub>3</sub> 1.003E-01 Ω Rth <sub>4</sub> 7.651E-02 Ω Rth <sub>5</sub> 1.956E+00 Ω Rth <sub>6</sub> 1.631E+00 Ω Rth <sub>7</sub> 3.775E-01 Ω Rth <sub>8</sub> 5.465E-03 Ω	Cth <sub>1</sub> 9.782E-06 F Cth <sub>2</sub> 9.797E-05 F Cth <sub>3</sub> 5.849E-05 F Cth <sub>4</sub> 1.642E-03 F Cth <sub>5</sub> 4.431E-04 F Cth <sub>6</sub> 4.924E-03 F Cth <sub>7</sub> 7.792E-02 F Cth <sub>8</sub> 6.763E+01 F  Rth <sub>1</sub> 6.862E-03 $\Omega$ Rth <sub>2</sub> 1.289E-02 $\Omega$ Rth <sub>3</sub> 1.003E-01 $\Omega$ Rth <sub>4</sub> 7.651E-02 $\Omega$ Rth <sub>5</sub> 1.956E+00 $\Omega$ Rth <sub>6</sub> 1.631E+00 $\Omega$ Rth <sub>7</sub> 3.775E-01 $\Omega$ Rth <sub>8</sub> 5.465E-03 $\Omega$	Cth <sub>1</sub> 9.782E-06 F Cth <sub>2</sub> 9.797E-05 F Cth <sub>3</sub> 5.849E-05 F Cth <sub>4</sub> 1.642E-03 F Cth <sub>5</sub> 4.431E-04 F Cth <sub>6</sub> 4.924E-03 F Cth <sub>7</sub> 7.792E-02 F Cth <sub>8</sub> 6.763E+01 F  Rth <sub>1</sub> 6.862E-03 Ω Rth <sub>2</sub> 1.289E-02 Ω Rth <sub>3</sub> 1.003E-01 Ω Rth <sub>4</sub> 7.651E-02 Ω Rth <sub>6</sub> 1.631E+00 Ω Rth <sub>7</sub> 3.775E-01 Ω Rth <sub>8</sub> 5.465E-03 Ω  P  BUK7M42-60E  3/3/2016 4.17 K/W	Cth, 9.782E-06 F Cth <sub>2</sub> 9.797E-05 F Cth <sub>3</sub> 5.849E-05 F Cth <sub>4</sub> 1.642E-03 F Cth <sub>5</sub> 4.431E-04 F Cth <sub>6</sub> 4.924E-03 F Cth <sub>7</sub> 7.792E-02 F Cth <sub>8</sub> 6.763E+01 F  Rth <sub>1</sub> 6.862E-03 Ω Rth <sub>2</sub> 1.289E-02 Ω Rth <sub>3</sub> 1.003E-01 Ω Rth <sub>4</sub> 7.651E-02 Ω Rth <sub>6</sub> 1.631E+00 Ω Rth <sub>7</sub> 3.775E-01 Ω Rth <sub>8</sub> 5.465E-03 Ω  Rth <sub>8</sub> 5.465E-03 Ω  Rth <sub>9</sub> 5.465E-03 Ω