

TABELA 5.1 Coeficientes usados na aproximação pelo primeiro termo para as soluções em série na condução transiente unidimensional

<i>Bi^a</i>	Parede Plana		Cilindro Infinito		Esfera	
	ζ_1 (rad)	<i>C</i> ₁	ζ_1 (rad)	<i>C</i> ₁	ζ_1 (rad)	<i>C</i> ₁
0,01	0,0998	1,0017	0,1412	1,0025	0,1730	1,0030
0,02	0,1410	1,0033	0,1995	1,0050	0,2445	1,0060
0,03	0,1723	1,0049	0,2440	1,0075	0,2991	1,0090
0,04	0,1987	1,0066	0,2814	1,0099	0,3450	1,0120
0,05	0,2218	1,0082	0,3143	1,0124	0,3854	1,0149
0,06	0,2425	1,0098	0,3438	1,0148	0,4217	1,0179
0,07	0,2615	1,0114	0,3709	1,0173	0,4551	1,0209
0,08	0,2791	1,0130	0,3960	1,0197	0,4860	1,0239
0,09	0,2956	1,0145	0,4195	1,0222	0,5150	1,0268
0,10	0,3111	1,0161	0,4417	1,0246	0,5423	1,0298
0,15	0,3779	1,0237	0,5376	1,0365	0,6609	1,0445
0,20	0,4328	1,0311	0,6170	1,0483	0,7593	1,0592
0,25	0,4801	1,0382	0,6856	1,0598	0,8447	1,0737
0,30	0,5218	1,0450	0,7465	1,0712	0,9208	1,0880
0,4	0,5932	1,0580	0,8516	1,0932	1,0528	1,1164
0,5	0,6533	1,0701	0,9408	1,1143	1,1656	1,1441
0,6	0,7051	1,0814	1,0184	1,1345	1,2644	1,1713
0,7	0,7506	1,0919	1,0873	1,1539	1,3525	1,1978
0,8	0,7910	1,1016	1,1490	1,1724	1,4320	1,2236
0,9	0,8274	1,1107	1,2048	1,1902	1,5044	1,2488

1,0	0,8603	1,1191	1,2558	1,2071	1,5708	1,2732
2,0	1,0769	1,1785	1,5994	1,3384	2,0288	1,4793
3,0	1,1925	1,2102	1,7887	1,4191	2,2889	1,6227
4,0	1,2646	1,2287	1,9081	1,4698	2,4556	1,7202
5,0	1,3138	1,2402	1,9898	1,5029	2,5704	1,7870
6,0	1,3496	1,2479	2,0490	1,5253	2,6537	1,8338
7,0	1,3766	1,2532	2,0937	1,5411	2,7165	1,8673
8,0	1,3978	1,2570	2,1286	1,5526	1,7654	1,8920
9,0	1,4149	1,2598	2,1566	1,5611	2,8044	1,9106
10,0	1,4289	1,2620	2,1795	1,5677	2,8363	1,9249
20,0	1,4961	1,2699	2,2881	1,5919	2,9857	1,9781
30,0	1,5202	1,2717	2,3261	1,5973	3,0372	1,9898
40,0	1,5325	1,2723	2,3455	1,5993	3,0632	1,9942
50,0	1,5400	1,2727	2,3572	1,6002	3,0788	1,9962
100,0	1,5552	1,2731	2,3809	1,6015	3,1102	1,9990
∞	1,5708	1,2733	2,4050	1,6018	3,1415	2,0000

$aBi = hL/k$ para a parede plana e hr_o/k para o cilindro infinito e a esfera. Veja a Figura 5.6.