

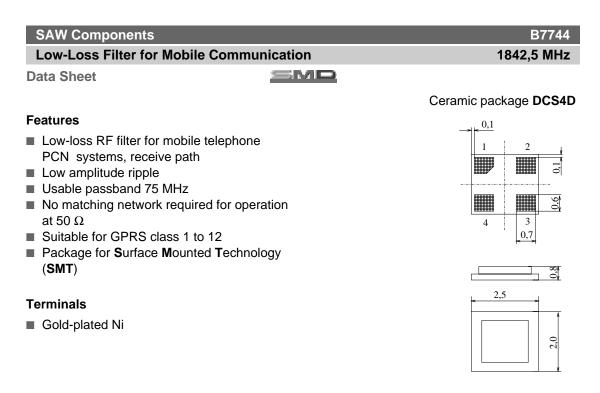
RF Filters for Cellular Phones

Series/Type: B7744

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39182B7744C810	B39182B7822C710	2007-09-21	2007-12-31	2008-03-31

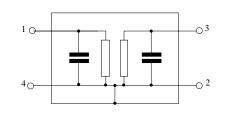
For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.



Dimensions in mm, approx. weight 0,012 g

Pin configuration

-	
1	Input
3	Output
2, 4	To be grounded



Туре	Ordering code	Marking and Package according to	Packing according to
B7744	B39182-B7744-C810	C61157-A7-A89	F61074-V8153-Z000

Electrostatic Sensitive Device (ESD)

Operable temperature range	Т	- 10 / + 80	°C	
Storage temperature range	T _{stg}	- 40 / + 85	°C	
DC voltage	V _{DC}	5	V	
ESD voltage	V _{ESD}	50	V	
Input power at	-			
GSM850, GSM900	P _{IN}	15	dBm	peakpowerofGSMsignal
GSM1800, GSM1900	$P_{\rm IN}$	12	dBm	duty cycle 4:8
Tx bands				

SAW Components Low-Loss Filter for Mobile Comr	_	_	1842	B7744 2,5 MHz	
Data Sheet	SMD				.,0
Characteristics					
Operating Temperature Range: Terminating source impedance: Terminating load impedance:	T = +25 $Z_{\rm S} = 50.9$ $Z_{\rm L} = 50.9$	Ω			
		min.	typ.	max.	
Center frequency	f _C	_	1842,5	—	MHz
Maximum insertion attenuation 1805,0 188	α _{max} 0,0 MHz	_	2,4	3,0	dB
Amplitude ripple (p-p) 1805,0 188	Δα 0,0 MHz	_	0,9	1,7	dB
Input VSWR 1805,0 188	0,0 MHz	_	1,9	2,2	
Output VSWR 1805,0 188	0,0 MHz	_	1,9	2,2	
Attenuation	Q				
0,0 148		35	37	_	dB
1480,0 170 1705,0 178		28 12	32 16		dB dB
1920,0 198		15	21		dB
1980,0 240	,	23	25	_	dB
2400,0 250		30	37	_	dB
2500,0 361		25	36	-	dB
3610,0 376		35	40	-	dB
3760,0 600	0,0 MHz	25	34	—	dB

SAW Components							B7744
Low-Loss Filter for Mobile Communication						1842	2,5 MHz
Data Sheet		SN					
Characteristics							
Operating Temperature Range: Terminating source impedance: Terminating load impedance:		Z_{S}	= -10 to = 50 Ω = 50 Ω				
				min.	typ.	max.	
Center frequency			f _C	—	1842,5	-	MHz
Maximum insertion attenuation 1805,0 1	880,0	MHz	α_{max}	_	2,4	3,2	dB
Amplitude ripple (p-p) 1805,0 … 1	880,0	MHz	Δα	_	0,9	1,9	dB
Input VSWR 1805,0 1	880.0	MHz		_	1,9	2,2	
Output VSWR							
1805,0 1	880,0	MHz			1,9	2,2	
Attenuation			α				
0,0 1		MHz		35	37	-	dB
1480,0 1	,			28	32	-	dB
1705,0 1				11	15	-	dB
	980,0			15 22	21 24	-	dB dB
	2400,0 2500,0			22 30	24 37		dВ
2400,0 2 2500,0 3				30 25	37		dВ
2500,0 3 3610,0 3				25 35	40		dB
3760,0 6				25	40 34		dB
0.00,0 0	,.						

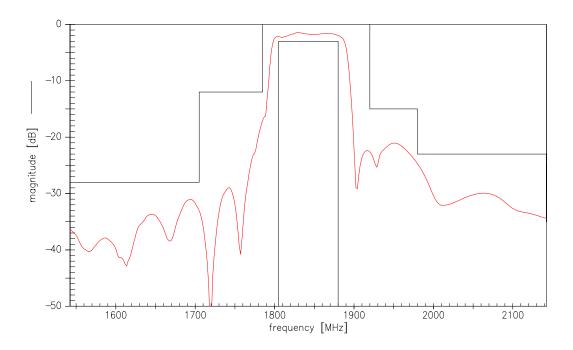
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⊘TDK

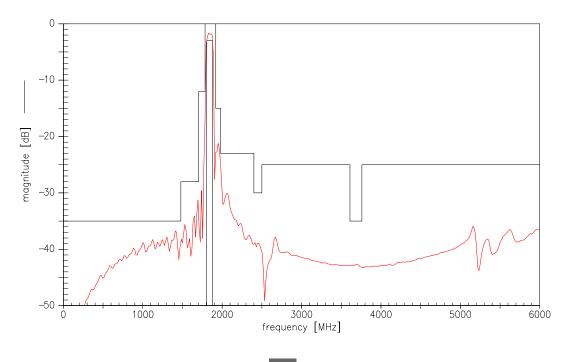
CharacteristicsOperating Temperature Range: $T = -30 \text{ to } +85^{\circ}\text{C}$ Terminating source impedance: $Z_{\text{S}} = 50 \ \Omega$ Terminating load impedance: $Z_{\text{L}} = 50 \ \Omega$ Min. typ. max.Center frequency f_{C} $ 1842,5$ $-$ MHzMaximum insertion attenuation α_{max} $ 2,4$ $3,2$ dBAmplitude ripple (p-p) $\Delta \alpha$ $ 0,9$ $1,9$ dBInput VSWR $1805,0 \dots 1880,0 \ \text{MHz}$ $ 1,9$ $2,2$	SAW Components					B7744
Characteristics Operating Temperature Range: T = -30 to +85°C Terminating source impedance: $Z_{\rm L}$ source impedance: Terminating load impedance: Z, = 50 Ω Terminating load impedance: Classing a source impedance: Terminating to +85°C Terminating load impedance: Z, = 50 Ω Center frequency f _C - 1842,5 MHz Maximum insertion attenuation α_{max} - 2,4 3,2 dB Maximum insertion attenuation α_{max} - 2,4 3,2 dB Amplitude ripple (p-p) $\Delta \alpha$ - 1,9 2,2 Output VSWR 1805,0 MHz - 1,9 2,2 Attenuation α α - 1,9 2,22 C	Low-Loss Filter for Mobile Comm			1842	,5 MHz	
Operating Temperature Range: Terminating source impedance: $T = -30 \text{ to } +85^{\circ}\text{C}$ Zs $= 50 \Omega$ Terminating load impedance: $Z_L = 50 \Omega$ Center frequency f_C $ 1842,5$ $-$ MHz Maximum insertion attenuation 1805,0 α_{max} $ 2,4$ $3,2$ dB Amplitude ripple (p-p) 1805,0 \ldots 1880,0 MHz $ 0,9$ $1,9$ dB Input VSWR 1805,0 \ldots 1880,0 MHz $ 1,9$ $2,2$ A Attenuation $0,0$ \ldots 1880,0 MHz $ 1,9$ $2,2$ A Mattenuation $1805,0$ α α $ 1,9$ $2,2$ A Mattenuation $0,0$ \ldots 1880,0 MHz $ 1,9$ $2,2$ A Attenuation α α $ 1,9$ $2,2$ A $1480,0$ \ldots 1785,0 MHz $ 1,9$ $2,2$ A A α α α α α α α α	Data Sheet	SMD				
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Center frequency $f_{\rm C}$ - 1842,5 - MHz Maximum insertion attenuation 1805,0 $\alpha_{\rm max}$ 1805,0 $\alpha_{\rm max}$ - 2,4 3,2 dB Amplitude ripple (p-p) 1805,0 $\Delta \alpha$ 1805,0 - $\Delta \alpha$ 1805,0 - 0,9 1,9 dB Input VSWR 1805,0 1880,0 MHz - 1,9 2,2 A Output VSWR 1805,0 1880,0 MHz - 1,9 2,2 A Attenuation α - 1,9 2,2 A Attenuation α - 1,9 2,2 A 1480,0 1705,0 MHz 35 37 - dB 1920,0 1880,0 MHz 35 37 - dB 1920,0 1880,0 MHz 35 37 - dB 1920,0 1880,0 MHz 35 37 - dB	Operating Temperature Range: Terminating source impedance: Terminating load impedance:	$Z_{\rm S} = 50.9$	Ω			
Maximum insertion attenuation 1805,0 α_{max} - 2,4 3,2 dB Amplitude ripple (p-p) $\Delta \alpha$ - 0,9 1,9 dB Iso5,0 1880,0 MHz - 0,9 1,9 dB Input VSWR 1805,0 1880,0 MHz - 1,9 2,2 Imput VSWR Iso5,0 Iso5,0 MHz 35 37 - dB Iso5,0 Iso5,0 MHz 35 37 - dB Attenuation α <			min.	typ.	max.	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Center frequency	f _C	_	1842,5	-	MHz
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Maximum insertion attenuation 1805,0 1880		_	2,4	3,2	dB
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Amplitude ripple (p-p) 1805,0 1880		_	0,9	1,9	dB
1805,0 1880,0 MHz 1,9 2,2 Attenuation α 1,9 2,2 0,0 1480,0 MHz 35 37 dB 1480,0 1705,0 MHz 28 32 dB 1705,0 1785,0 MHz 10 15 dB 1920,0 1980,0 MHz 15 21 dB 1980,0 2400,0 MHz 30 37 dB 2400,0 2500,0 MHz 30 37 dB 3610,0 3610,0 MHz 35 40 dB	Input VSWR 1805,0 1880	,0 MHz	_	1,9	2,2	
0,0 1480,0 MHz 35 37 dB 1480,0 1705,0 MHz 28 32 dB 1705,0 1785,0 MHz 10 15 dB 1920,0 1980,0 MHz 15 21 dB 1980,0 2400,0 MHz 22 24 dB 2400,0 2500,0 MHz 30 37 dB 2500,0 3610,0 MHz 25 36 dB 3610,0 3760,0 MHz 35 40 dB	Output VSWR 1805,0 1880	,0 MHz	_	1,9	2,2	
0,0 1480,0 MHz 35 37 dB 1480,0 1705,0 MHz 28 32 dB 1705,0 1785,0 MHz 10 15 dB 1920,0 1980,0 MHz 15 21 dB 1980,0 2400,0 MHz 22 24 dB 2400,0 2500,0 MHz 30 37 dB 2500,0 3610,0 MHz 25 36 dB 3610,0 3760,0 MHz 35 40 dB	Attenuation	α				
1705,0 1785,0 MHz 10 15 — dB 1920,0 1980,0 MHz 15 21 — dB 1980,0 2400,0 MHz 22 24 — dB 2400,0 2500,0 MHz 30 37 — dB 2500,0 3610,0 MHz 25 36 — dB 3610,0 3760,0 MHz 35 40 — dB			35	37	_	dB
1920,0 1980,0 MHz 15 21 — dB 1980,0 2400,0 MHz 22 24 — dB 2400,0 2500,0 MHz 30 37 — dB 2500,0 3610,0 MHz 25 36 — dB 3610,0 3760,0 MHz 35 40 — dB	1480,0 1705	,0 MHz	28	32	_	dB
1980,0 2400,0 MHz 22 24 — dB 2400,0 2500,0 MHz 30 37 — dB 2500,0 3610,0 MHz 25 36 — dB 3610,0 3760,0 MHz 35 40 — dB	1705,0 1785	,0 MHz	10	15		dB
2400,0 2500,0 MHz 30 37 — dB 2500,0 3610,0 MHz 25 36 — dB 3610,0 3760,0 MHz 35 40 — dB	1920,0 1980	,0 MHz	15	21	-	dB
2500,0 3610,0 MHz 25 36 — dB 3610,0 3760,0 MHz 35 40 — dB		,				
3610,0 3760,0 MHz 35 40 — dB		,			-	
					-	
3760,0 6000,0 MHz 25 34 — dB					-	
	3760,0 6000	,U MHZ	25	34		aR



Transfer function (spec for 25°C)



Transfer function (wideband)



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Aug 07, 2003

SAW Components		B7744
Low-Loss Filter for Mo	bile Communication	1842,5 MHz
Data Sheet	SMD	

=MD

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