

Surface Mount Balun Transformers

Surface Mount Balun Transformers SBT Series (表在接著型阻抗匹配器-----SBT 系列)



Features(特徵):

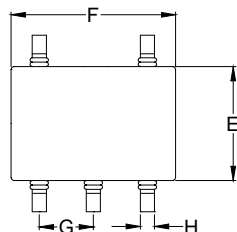
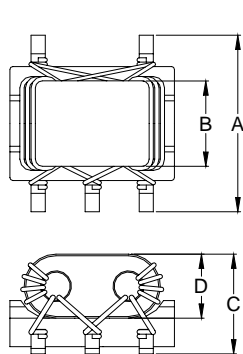
1. Based terminal are treated, allows mounting "as is" on a PCB. (基座端面已處理過可直接上印刷電路板。)
2. Paired wire coil for high stability. (成對繞線線圈以提高穩定性。)

Applications(應用):

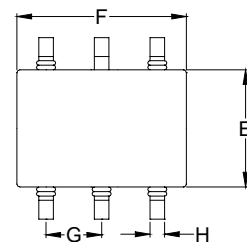
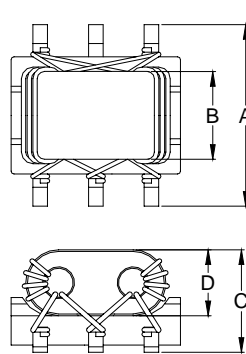
Deal use in double balance mixer and broad-band transformers.
適用於雙平衡式混頻器及寬頻變壓器。

Shape & Dimensions(外觀呎吋):

5 Pin Type:



6 Pin Type:



Item	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
SBT4F	5.50 Max	2.00 Typ.	3.20 Max	2.00 (Typ.)	2.70 (Typ.)	4.50 Max	1.50±0.15	0.50±0.10
SBT5F	6.90 Max	3.00 Typ.	5.00 Max	3.00 (Typ.)	4.00 (Typ.)	6.90 Max	2.00±0.15	0.60±0.10
SBT5FL	6.70 Max	3.00 Typ.	3.60 Max	2.00 (Typ.)	4.00 (Typ.)	6.30 Max	2.00±0.15	0.60±0.10

Standard Transformers Selection Guide(SBT4F/5FL)

SBT4F Series/Double Balanced Mixer


Part Number	Number of turns per Winding	Operating Frequency Range (MHz)	Insertion Loss (dB)	Pin Connections Fig.	Winding distributing
SBT4F-1007	2	25 ~ 2000	3	1	
SBT4F-1009	3	6 ~ 2000	3	1	
SBT4F-1006	3	150 ~ 2300	3	1	
SBT4F-1010	4	3.5 ~ 2000	3	1	
SBT4F-1018	5	2 ~ 2000	3	1	

SBT4F Series/Frequency Mixer

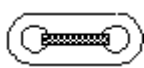
Part Number	Number of turns per Winding	Operating Frequency Range (MHz)	Insertion Loss (dB)	Pin Connections Fig.	Winding distributing
SBT4F-1025	1	—		2	
SBT4F-1019	2	8 ~ 750	3	2	
SBT4F-1026	3	3.5 ~ 700	3	2	

Surface Mount Balun Transformers

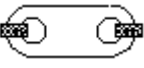
SBT4F Series/Balun Transformer

Part Number	Number of turns per Winding	Operating Frequency Range (MHz)	Insertion Loss (dB)	Pin Connections Fig.	Winding distributing
SBT4F-1021	1½	20 ~ 750	3	3	
SBT4F-1022	2½	4.5 ~ 3300	3	3	
SBT4F-1023	3½	2.3 ~ 2700	3	3	
SBT4F-1024	4½	1.5 ~ 2400	3	3	


SBT4F Series/Distributor

Part Number	Number of turns per Winding	Operating Frequency Range (MHz)	Insertion Loss (dB)	Pin Connections Fig.	Winding distributing
SBT4F-1079	2	1300 ~ 1700	IN to OUT-1, 2 4.5db max	5	
SBT4F-1076	3	800 ~ 1000	IN to OUT-2 (ISOLATION) 15dB MIN.	5	

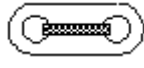
SBT5FL Series/Double Balanced Mixer

Part Number	Number of turns per Winding	Operating Frequency Range (MHz)	Insertion Loss (dB)	Pin Connections Fig.	Winding distributing
SBT5FL-1003	2	30 ~ 850	3	1	
SBT5FL-1004	3	6.5 ~ 1000	3	1	
SBT5FL-1007	4	3.5 ~ 1600	3	1	
SBT5FL-1008	5	2.5 ~ 1500	3	1	

SBT5FL Series/Frequency Mixer

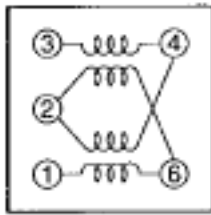
Part Number	Number of turns per Winding	Operating Frequency Range (MHz)	Insertion Loss (dB)	Pin Connections Fig.	Winding distributing
SBT5FL-1027	1	—	3	2	
SBT5FL-1028	2	8 ~ 550	3	2	
SBT5FL-1029	3	3.5 ~ 500	3	2	
SBT5FL-1030	4	2 ~ 370	3	2	
SBT5FL-1037	1	—	3	2	
SBT5FL-1038	2	500 ~ 850	3	2	
SBT5FL-1039	3	240 ~ 500	3	2	
SBT5FL-1040	4	85 ~ 380	3	2	

SBT5FL Series/Balun Transformer

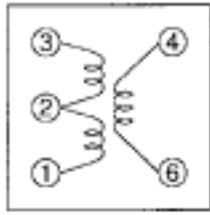
Part Number	Number of turns per Winding	Operating Frequency Range (MHz)	Insertion Loss (dB)	Pin Connections Fig.	Winding distributing
SBT5FL-1048	1½	5.5 ~ 850	3	3	
SBT5FL-1049	2½	2.5 ~ 2000	3	3	
SBT5FL-1050	3½	1.2 ~ 1700	3	3	
SBT5FL-1051	4½	0.8 ~ 1400	3	3	
SBT5FL-1078	5½	0.6 ~ 1300	3	3	
SBT5FL-1053	1½	160 ~ 2200	3	4	
SBT5FL-1017	2½	55 ~ 1700	3	4	
SBT5FL-1054	3½	30 ~ 1400	3	4	

Surface Mount Balun Transformers

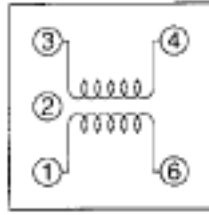
Pin Connections:



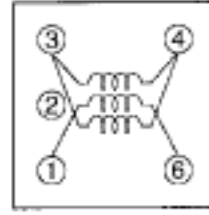
Double balanced
Fig. 1



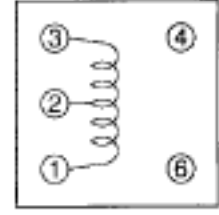
Mixer transformer
Fig. 2



Balun transformer
Fig. 3



Balun transformer
Fig. 4



Distributor
Fig. 5

Standard Transformers Selection Guide(SBT5F):

SBT5 Series/Double Balanced Mixer

Part Number	Number of turns per Winding	Operating Frequency Range (MHz)	Insertion Loss	Pin Connections Fig.	Winding distributing
SBT5F-1012	1	50MHz~400MHz	10dB max.	1	
SBT5F-1013	2	10MHz~1.0GHz	6dB max.	1	
SBT5F-1003	3	8MHz~800MHz	3.5dB max.	1	
SBT5F-1008	4	6MHz~600MHz	2.5dB max.	1	
SBT5F-1011	5	5MHz~500MHz	2dB max.	1	
SBT5F-1005	2	400MHz~1.3GHz	4dB max.	1	

SBT5F Series/Frequency Mixer


Part Number	Number of turns per Winding	Operating Frequency Range (MHz)	Insertion Loss	Pin Connections Fig.	Winding distributing
SBT5F-1085	Pri. 1x2 Sec. 1	—	3dB max.	2	
SBT5F-1052	Pri. 2x2 Sec. 2	9MHz~350MHz	3dB max.	2	
SBT5F-1024	Pri. 3x2 Sec. 3	3.5MHz~470MHz	3dB max.	2	
SBT5F-1086	Pri. 4x2 Sec. 4	2.2MHz~400MHz	3dB max.	2	
SBT5F-1087	Pri. 5x2 Sec. 5	1.5MHz~300MHz	3dB max.	2	

SBT5F Series/Distributor

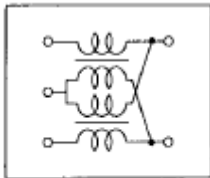
Part Number	Number of turns per Winding	Operating Frequency Range (MHz)	Insertion Loss	Pin Connections Fig.	Winding distributing
SBT5F-1014	---	20MHz~600MHz	IN to OUT-1, 2 4.5db max OUT-1 to OUT-2 (ISOLATION) 10dB min.	3	

Surface Mount Balun Transformers

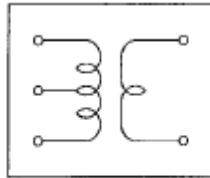
SBT5F Series/Directional Coupler

Part Number	Number of turns per Winding	Operating Frequency Range (MHz)	Insertion Loss	Pin Connections Fig.	Winding distributing
SBT5F-1015	4	6MHz~600MHz	IN to OUT-1 1.3dB max. IN to OUT-2 11dB ~ 14dB	4	
SBT5F-1006	5	6MHz~600MHz	IN to OUT-1 0.9dB max. IN to OUT-2 13dB ~ 16dB	4	
SBT5F-1007	6	6MHz~600MHz	IN to OUT-1 0.8dB max. IN to OUT-2 15dB ~ 17dB	4	

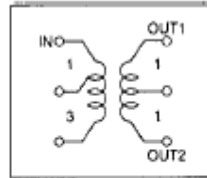
Pin Connections:



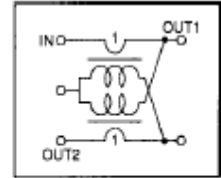
Double balanced mixer
Fig. 1



Transformer
Fig. 2



Distributor
Fig. 3



Directional coupler
Fig. 4