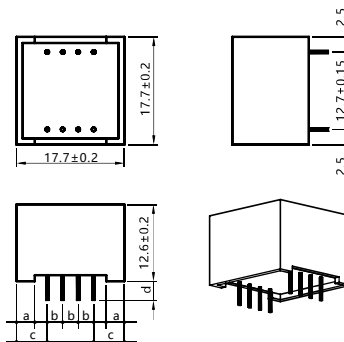


# SHAT 16XX SERIES SURFACE MOUNT LINE MATCHING AUDIO TRANSFORMERS



## FEATURES:

- Fully encapsulated
- Low profile
- High dielectric strength
- Ten models available
- Ex stock
- Competitively priced
- Lead free
- RoHS compliant



**Note:**  
The SHAT1600 Series Line Matching Transformers meet the return loss specifications of BS 6305. It is important, however, to use the circuit recommended by BS 6305 for return loss. The SHAT1600 Series meet EN41003.

a=3.0  
b=2.54  
c=5.04  
d=3.2±0.8  
ALL DIMENSIONS IN mm



### Additional information:

We reserve the right to make technical changes or modify the contents of this document without prior notice.

SHARE Ltd. Does not accept any responsibility what so ever for potential errors or possible lack of information in this document.

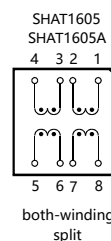
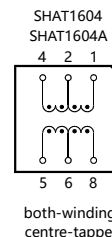
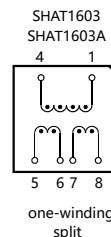
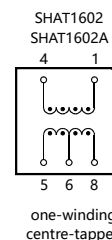
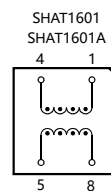
We can offer that even custom-made transformers will be covered by approvals from UL, CSA, KEMA, etc., but we will be happy to assist you in implementing them. New approvals may be required.

- Tape and reel is standard
- Bulk packaging available for faller quantities
- Custom design available
- Tolerance: 5% is standard,
- Tighter tolerance available

- Line matching
- Modems
- Fax modems
- Laptop Computer
- Telecommunications
- Instrumentation
- PCMCIA

## STANDARD SPECIFICATIONS:

Parameters	Unit	Part Number										
		SHAT1601	SHAT1602	SHAT1603	SHAT1604	SHAT1605	SHAT1601A	SHAT1602A	SHAT1603A	SHAT1604A	SHAT1605A	
Ref. Temperature Data	°C	25	25	25	25	25	25	25	25	25	25	
Impedance (min./at 1.0kHz)	Primary	Ω	600	600	600	600 (150,150)	600 (150+150)	600	600	600	600 (150,150)	600 (150+150)
	Secondary	Ω	600	600 (150,150)	600 (150+150)	600 (150,150)	600 (150+150)	600 (150,150)	600 (150+150)	600 (150,150)	600 (150+150)	600 (150+150)
Inductance (min./at 0.2 kHz)	Primary	H	2.8	2.8	2.8	2.8 (0.7,0.7)	2.8 (0.7+0.7)	2.8	2.8	2.8	2.8 (0.7,0.7)	2.8 (0.7+0.7)
	Secondary	H	2.8	2.8 (0.7,0.7)	2.8 (0.7+0.7)	2.8 (0.7,0.7)	2.8 (0.7+0.7)	2.8 (0.7,0.7)	2.8 (0.7+0.7)	2.8 (0.7,0.7)	2.8 (0.7+0.7)	2.8 (0.7+0.7)
DC-Resistance (Typical/±10%)	Primary	Ω	66	66	66	66 (33,33)	66 (33+33)	90	90	90	90 (45,45)	90 (45+45)
	Secondary	Ω	66	66 (33,33)	66 (33+33)	66 (33,33)	66 (33+33)	90 (45,45)	90 (45+45)	90 (45,45)	90 (45,45)	90 (45+45)
Turns Ratio(±2%)		1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	
Winding Configurations	/	/	one winding centre tapped	one winding split	both windings centre tapped	both windings split	/	one winding centre tapped	one winding split	both windings centre tapped	both windings split	
Insertion Loss (at 2.0kHz)	dB			≤ 1.5						≤ 2.0		
Return Loss (Transformer 0.2-4.0kHz In Networks)	dB			≥ 10.0						≥ 8.0		
Shunt Loss (Typical)	kΩ			≥ 21.0						≥ 20.0		
Frequency Response (Typ./0.2-3.5kHz)	dB			9.0						9.0		
Wide Band Response(0.2-10kHz)	dB			-0.3						-0.5		
Power Level	dBm			-2.5						-4.5		
Longitudinal Balance(0.3-4.0kHz)	dB			-45.0~+3.0						-43.0~+3.0		
Distortion(0 dB/at 1.0kHz)	%			-80.0						-70.0		
Leakage Induction(Typical)	mH			≤ 0.1						≤ 0.25		
Dielectric Strength(P/5)	kVDC			14.0						14.0		
Temperature Range	Operation	°C		6.5						6.5		
	Storage	°C		-10~ +60						-10~ +60		
				-20~ +70						-20~ +70		
Specifications Met				BS6240:Construction and flammability(UL94V0)						CCITT:Rec.T/CD1-1 (Sept.1982)		
				BS6310:Isolation								
				BS6305:Returnloss(1982/paragraph4.3.2.2/b)								



Due to the unique design and the most advanced manufacturing techniques the 2 coils are fully identical, meaning there is no real primary nor secondary winding. Depending on the application, the transformers can be used either way.