

# RF TRANSFORMERS FARF 5S,5SL SERIES



## FEATURES

Pair wire coil for high stability.  
Base pin terminal treated  
Excellent Frequency Response  
Low Profile Low Cost

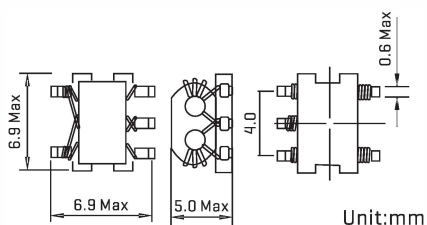
## OPTIONS

Bulk Packaging is Standard  
Custom design available dip Available

## APPLICATIONS:

Double balance mixers,broad-band impedance transformers  
Directional Couplers for Mixers  
Matching Power Combining and Splitting  
Step-Top box and cable modem

## PHYSICAL CHARACTERISTICS



Pin Connections

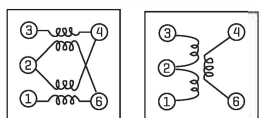


Fig.1

Fig.2

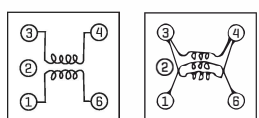
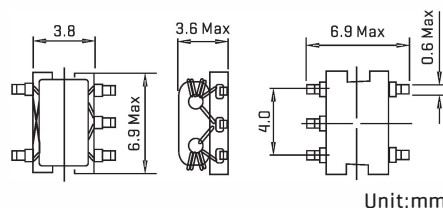


Fig.3

Fig.4



Unit:mm

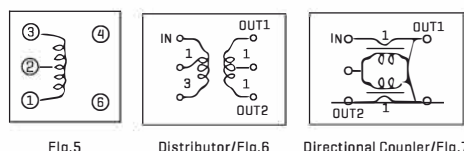


Fig.5

Distributor/Flg.6

Directional Coupler/Flg.7

## TECHNICAL INFORMATION:

Soldering methods: Wave,Reflow  
Operating Temperature: 0°C to 70°C  
Storage Temperature: -55°C to 125°C

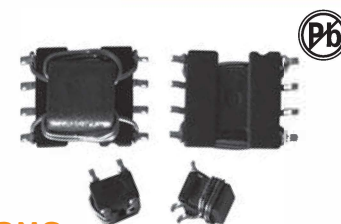
Note: All specifications subject to change without notice.

## STANDARD SPECIFICATIONS

	Part Number	Number of Turns per Winding	Operating Frequency Range	Insertion Loss	Fig
Double Balanced Mixer	FARF-5S-1012	1	50MHz-400MHz	10dB max.	1
	FARF-5S-1013	2	100MHz-1.0GHz	6dB max.	1
	FARF-5S-1003	3	8MHz-800MHz	3.5dB max.	1
	FARF-5S-1008	4	6MHz-600MHz	2.5dB max.	1
	FARF-5S-1011	5	5MHz-500MHz	2dB max.	1
Frequency Mixer	FARF-5S-1005	2	400MHz-1.3MHz	4dB max.	1
	FARF-5S-1085	1		3dB max.	2
	FARF-5S-1052	2	9MHz-350MHz	3dB max.	2
	FARF-5S-1024	3	3.5MHz-470GHz	3dB max.	2
	FARF-5S-1086	4	2.2MHz-400MHz	3dB max.	2
Power Divider /Combiner	FARF-5S-1087	5	1.5MHz-300MHz	3dB max	2
	FARF-5S-1014		20MHz-600MHz	IN to OUT-1.2 4.5dB max. OUT-1 to OUT-2 [ISOLATION] 10dB min.	6
Directional Coupler	FARF-5S-1015	4	6MHz-600MHz	IN to OUT-11.3dB max. IN to OUT-2.11dB -14dB	7
	FARF-5S-1006	5	6MHz-600MHz	IN to OUT-10.9dB max. IN to OUT-2.13dB -16dB	7
	FARF-5S-1007	6	6MHz-600MHz	IN to OUT-10.8dB max. IN to OUT-2.15dB -17dB	7
Double Balanced Mixer	FARF-5SL-1001	2	30MHz-850MHz	3dB	1
	FARF-5SL-1002	3	6.5MHz-1000MHz	3dB	1
	FARF-5SL-1003	4	3.5MHz-1600MHz	3dB	1
	FARF-5SL-1004	5	2.5MHz-1500MHz	3dB	1
	FARF-5SL-1027	1	-	3dB	2
Frequency Mixer	FARF-5SL-1028	2	8MHz-550MHz	3dB	2
	FARF-5SL-1029	3	3.5MHz-500MHz	3dB	2
	FARF-5SL-1030	4	2MHz-370MHz	3dB	2
	FARF-5SL-1037	1	-	3dB	2
	FARF-5SL-1038	2	500MHz-850MHz	3dB	2
	FARF-5SL-1039	3	240MHz-500MHz	3dB	2
	FARF-5SL-1040	4	85MHz-380MHz	3dB	2
	FARF-5SL-1048	11/2	5.5MHz-850MHz	3dB	3
Balun Transformer	FARF-5SL-1049	21/2	2.5MHz-2200MHz	3dB	3
	FARF-5SL-1050	31/2	1.2MHz-1700MHz	3dB	3
	FARF-5SL-1051	41/2	0.8MHz-1400MHz	3dB	3
	FARF-5SL-1078	51/2	0.6MHz-1300MHz	3dB	3
Balun Transformer	FARF-5SL-1053	11/2	160MHz-2200MHz	3dB	4
	FARF-5SL-1017	21/2	55MHz-1700MHz	3dB	4
	FARF-5SL-1054	31/2	30MHz-1400MHz	3dB	4

Note:J=±5%, K=±10%,M=±20%

# COMMON MODE CHOKES FASB0404SS,0604 SERIES



## FEATURES

High common mode impedance in small size.  
It is effective for common mode noise suppression in digital equipment which radiation is caused from cables.  
Suitable for reflow soldering.  
Rated current:0.65A to 3.0A.  
Parameters Test Temp:20°C.  
Test Frequency:100MHz.  
Operating temperature:-25°C to +105°C.  
Storage Temp:-0°C to +40°C.  
Resistance to Soldering Heat:260°C for 10 sec.  
Temperature Rise:40°C Typ. at Rated Current.  
All parts meet ROHS compliance:

## APPLICATIONS

Effective in high frequency noise suppression and suitable for suppression of radiation noise in signal cables.  
The dual winding type common mode choke coil choke coil structure enables noise suppression without degrading the signal.

## GENERAL SPECIFICATIONS

SB XXXX - XXX  
Fpr example:SB0604-015

## ELECTRICAL CHARACTERISTICS

Part Number	Impedance [Ohm]Min	D.C.R [Ohm]Max at 20°C	Rated current [mA]Max	Hi-Pot
FASB0404SS-334R	334	100	3000	AC250/1mA/1S

Part Number	Impedance [Ohm]Min	D.C.R [Ohm]Max at 20°C	Rated current [mA]Max	Hi-Pot
FASB0604-015	70	60	900	AC250/1mA/1S
FASB0604-025	180	65	800	AC250/1mA/1S
FASB0604-035	280	80	700	AC250/1mA/1S
FASB0604-045	380	120	650	AC250/1mA/1S

## TECHNICAL INFORMATION AND ELECTRICAL SCHEMATIC & PAD LAYOUT

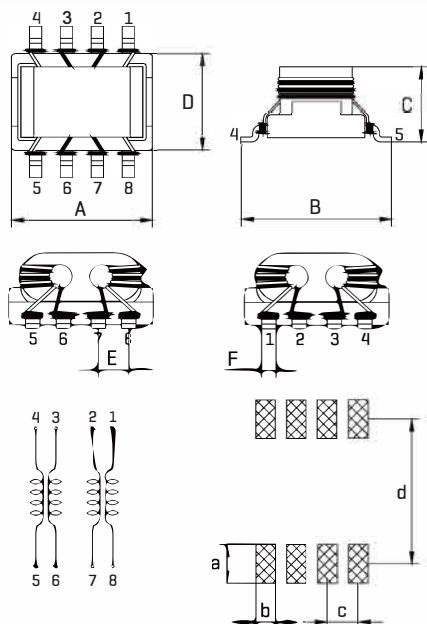


FIG1.

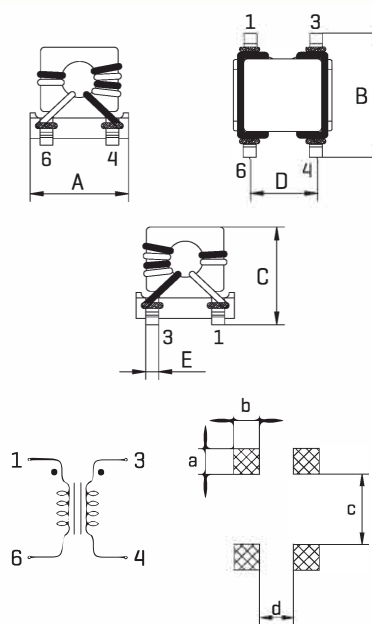


FIG2.

### DIMENSIONS:MM

Part number	A	B	C	D	E	F	a	b	c	d	FIG
FASB0404SS	3.8±0.3	4.90±0.3	5.00 Max	2.54±0.2	0.50 REF		1.10 REF	1.10 REF	3.00 REF	1.44 REF	1
FASB0604	5.85±0.3	6.25±0.3	3.60 Max	4.00±0.3	1.27 REF	0.50 REF	1.60 REF	0.80 REF	1.27 REF	6.00 REF	2

# SURFACE-MOUNT COMMON MODE CHOKES FACM09-10 SERIES



## FEATURES:

LCP Base  
High Frequency Design  
Excellent Mechanical Strength  
Excellent Solderability  
High Reliability  
Low Profile

## OPTIONS:

Packaging: Tape & Reel is standard  
(Qty: 2000 pcs)  
Bulk packaging available for smaller quantities  
Tolerance: 10% and 5% is standard  
tighter tolerances available

## COMMON APPLICATIONS:

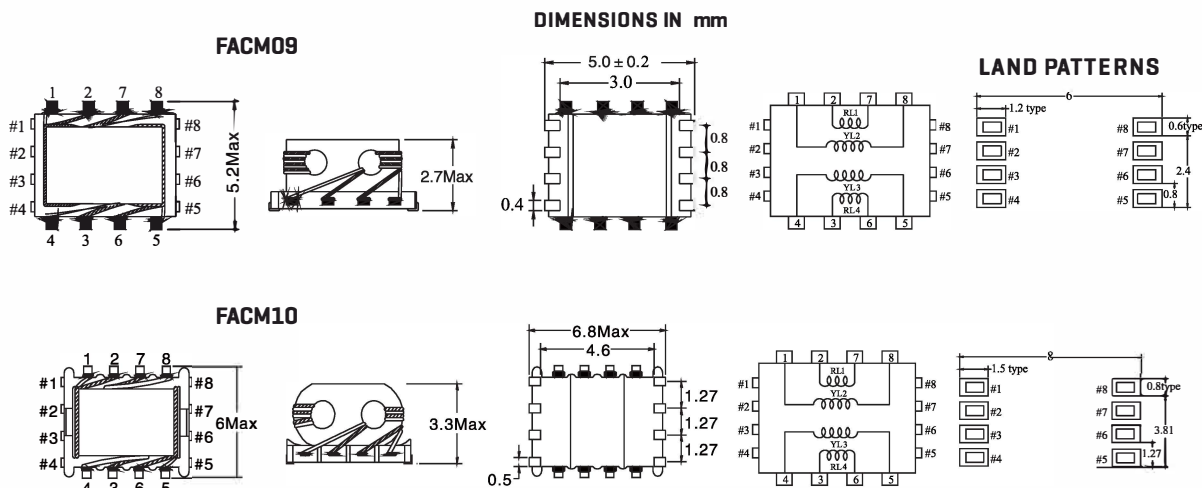
Datalline Noise Suppression  
Video Cameras  
Communication System  
Automotive Systems  
Liquid Crystal Televisions  
Hard Disk Drives  
Network Systems  
Computer Peripheral Equipment

## ELECTRICAL CHARACTERISTICS

Part Number	Insertion Loss[dB]				DCR $\Omega$ Max	IDC A Max	Impedance [Typical]		Wistanding Voltage [CH-901]
	50MHz	100MHz	300MHz	500MHz			100MHz	100MHz	
FACM 09- 1394A	2.8±2.0	7.3±2.5	12.0±3.0	14.0±3.0	0.3	0.65	220 $\Omega$	100MHz	50VDC
FACM 10- 121	1.3±0.5	4.0±1.5	8.0±2.0	11.0±3.0	0.3	0.65	120 $\Omega$	100MHz	100VAC
FACM 10- 151	2.5±1.0	3.0±1.5	4.0±2.0	5.0±3.0	0.3	0.30	150 $\Omega$	100MHz	100VAC
FACM 10- 161	3.0±1.0	8.0±2.0	13.0±2.5	15.0±3.0	0.3	0.30	160 $\Omega$	100MHz	100VAC
FACM 10- 221	2.0±1.0	6.0±2.0	12.0±2.5	14.0±3.0	0.12	0.65	220 $\Omega$	100MHz	100VAC

Note: 1. K=±10%, M=±20%, N=±30%

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



- Inductance Testing: 1KHz 1V HP4284A
  - Z test with HP4191A or HP4395A
  - RDC: QuadTech 1880 Milliohm meter
  - Operating temperature: -40°C to +105°C
  - Storage Temperature: -40°C to +105°C
  - Resistance to soldering heat: 260°C for 10 seconds
  - Marking: Part number and date code
- Note: All specifications subject to change without notice.