

# TELECOM TRANSFORMERS

## FW EFD & ER SERIES

### FEATURES:

- High inductance.
- Low leakage inductance
- Low interwind capacitance
- Compact size and Surface-mounted
- Designed to meet UL, CSA, VDE, BABT safety standard

### OPTIONS:

- Tape and reel is standard
- Bulk packaging available for smaller quantities
- Custom design available
- Tolerance: 5% is standard, tighter available
- SMD EFD 25/30 available

### COMMON APPLICATIONS:

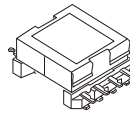
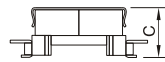
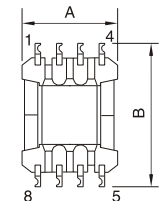
- Modem
- Fax machine, Hub
- ISDN, ADSL, HDSL, PABX
- Other telecommunication facilities etc
- Switching power supplies
- AC-DC, DC-DC converters

## ELECTRICAL CHARACTERISTICS

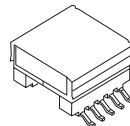
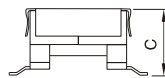
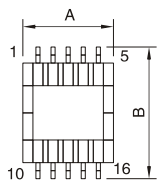
Part No.	Inductance(10kHz/0.1V Typ)	Turn Ratio	DCR( $\Omega$ max)	Hi-pot (Pri-Sec)	Schematic
FWEFD12	27 $\mu$ H $\pm$ 10%(3-4)	0.74:1:0.71(3-4:1-2:6-5)	0.21:1.15:0.35(3-4:1-2:6-5)	1250VAC	D
FWEFD15	4.0mH $\pm$ 6%(1-5=10-6)	1:1(1-5:10-6)	6.25:6.25(1-5:10-6)	1000VDC	A
FWEFD20	20mH $\pm$ 6%(1-5 tie 10+6)	1:1(1-5:10-6)	5.5:5.5(1-5:10-6)	1000VDC	A
FWER9.5	200 $\mu$ H Typ.(1-4)	1:1(1-4:5-8)	0.12:0.132(1-4:5-8)	1000VDC	B
FWER11.5	58 $\mu$ H $\pm$ 10%(4-2)	1:2(4-2:9-6)	0.35:1.75(4-2:9-6)	500VAC	C
FWER14.5	14.4 $\mu$ H $\pm$ 10%(1-3)	1:1:1(1-3:4-5:10-6)	0.063:0.28:0.066(1-3:4-5:10+9-6+7)	500AC	E

## TECHNICAL INFORMATION

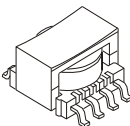
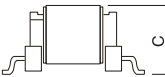
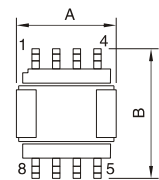
## PHYSICAL CHARACTERISTICS



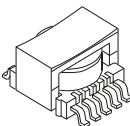
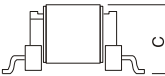
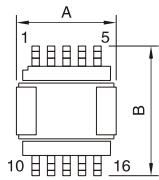
EFD12



EFD15  
EFD20



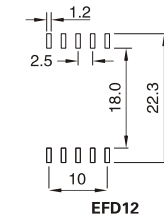
ER9.5



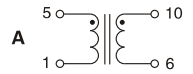
ER11.5  
ER14.5

Dimensions(mm)

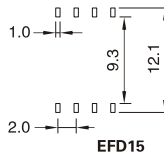
Part No.	EFD12	EFD15	EFD20	ER9.5	ER11.5	ER14.5
A	14.0max	16.5max	22.0max	10.5max	12.2max	15.2max
B	21.5max	22.3max	26.0max	12.1max	12.7max	16.5max
C	7.4max	8.6max	11.4max	6.2max	6.5max	7.2max



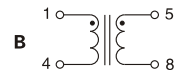
EFD12



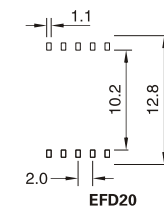
A



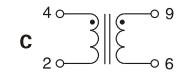
EFD15



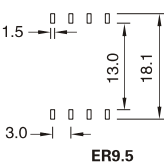
B



EFD20



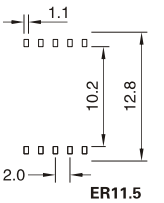
C



ER9.5



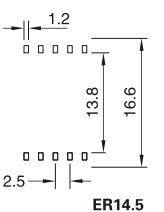
D



ER11.5



E



ER14.5

Note: All Dimensions in mm