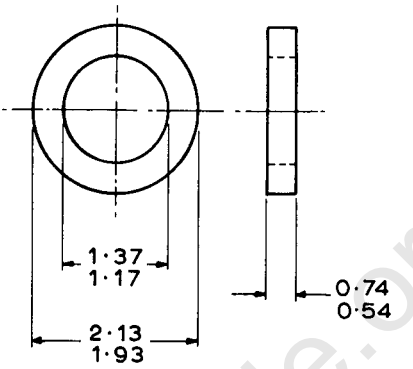


All dimensions in millimetres

TYPE No. FX1969 Ferroxcube grade A5

EFFECTIVE PARAMETERS

For calculating the magnetic properties, the following parameters should be used:

Parameter	Symbol	Millimetre units	Centimetre units
Effective magnetic path length	ℓ_e	4.99mm	0.499cm
Effective area of magnetic path	A_e	0.237mm^2	0.00237cm^2
Effective volume	V_e	1.18mm^3	0.00118cm^3
$\sum \frac{\ell}{A}$	C_1	21.1mm^{-1}	211cm^{-1}

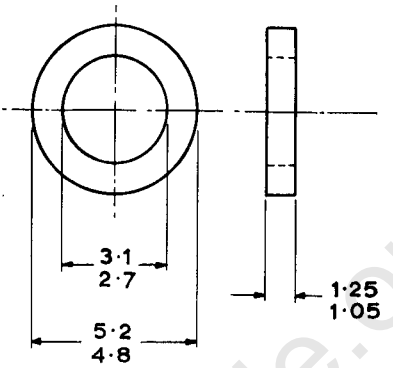
For electrical and magnetic design data see page 2.

ELECTRICAL AND MAGNETIC DESIGN DATA

Parameter	Symbol	Frequency	Magnitude
Effective permeability	μ_e	<100kHz	>1000
Turns factor (Turns for 1 mH)	α	—	<129.5
Residual plus eddy current loss factor	$\frac{\tan\delta_{r+e}}{\mu_e}$	100kHz	$<12\times10^{-6}$
Typical temperature coefficient (between +25 and +50°C) (See note 2)	TC	—	1500×10^{-6}/degC

Notes: (1) The above parameters are measured at
a flux density ($\hat{B}$) at A_e of <0.1 mT (1 gauss)
a temperature of 25°C

(2) TC is quoted for guidance only. For guaranteed material specifications see data sheet LINEAR FERRITE MATERIALS in Mullard Technical Handbook volume 6 part 2.



All dimensions in millimetres

TYPE No. FX2073 Ferroxcube grade A5

EFFECTIVE PARAMETERS

For calculating the magnetic properties, the following parameters should be used:

Parameter	Symbol	Millimetre units	Centimetre units
Effective magnetic path length	ℓ_e	11.8mm	1.18cm
Effective area of magnetic path	A_e	1.18mm^2	0.0118cm^2
Effective volume	V_e	13.9mm^3	0.0139cm^3
$\sum\frac{\ell}{A}$	C_1	10.0mm^{-1}	100cm^{-1}

For electrical and magnetic design data see page 2.

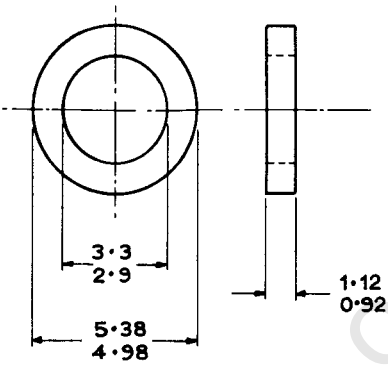
ELECTRICAL AND MAGNETIC DESIGN DATA

Parameter	Symbol	Frequency	Magnitude
Effective permeability	μ_e	<100kHz	>1000
Turns factor (Turns for 1 mH)	α	—	<89.19
Residual plus eddy current loss factor	$\frac{\tan\delta_{r+e}}{\mu_e}$	100kHz	$<12\times10^{-6}$
Typical temperature coefficient (between +25 and +50°C) (See note 2)	TC	—	1500×10^{-6}/degC

Notes: (1) The above parameters are measured at
a flux density ($\hat{B}$) at A_e of <0.1 mT (1 gauss)
a temperature of 25°C

(2) TC is quoted for guidance only. For guaranteed material specifications see data sheet LINEAR FERRITE MATERIALS in Mullard Technical Handbook volume 6 part 2.

FERROXCUBE TOROIDS 5·2mm



All dimensions in millimetres

TYPE No. FX2270 Ferroxcube grade B4

TYPE No. FX1886 Ferroxcube grade B5

EFFECTIVE PARAMETERS

For calculating the magnetic properties, the following parameters should be used:

Parameter	Symbol	Millimetre units	Centimetre units
Effective magnetic path	ℓ_e	12.5mm	1.25cm
Effective area of magnetic path	A_e	1.03mm^2	0.0103cm^2
Effective volume	V_e	12.9mm^3	0.0129cm^3
$\sum \frac{\ell}{A}$	C_1	12.1mm^{-1}	121cm^{-1}

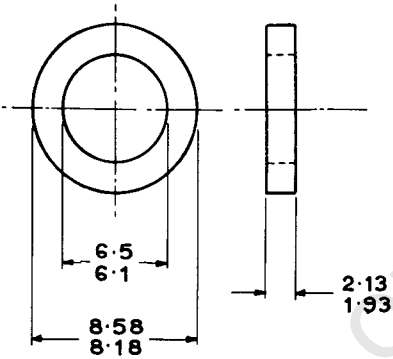
For electrical and magnetic design data see page 2.

ELECTRICAL AND MAGNETIC DESIGN DATA

Parameter	Symbol	FX2270		FX1886	
		Frequency	Magnitude	Frequency	Magnitude
Effective permeability	μ_e	<10MHz	40–80	<50MHz	10 to 25
Turns factor (Turns for 1 mH)	α	—	346.8 to 490.6	—	620.5 to 981.1
Residual plus eddy current loss factor	$\frac{\tan\delta_{r+e}}{\mu_e}$	10MHz	$<300\times 10^{-6}$	50MHz	$<3000\times 10^{-6}$
Typical temperature coefficient (between +25 and +50°C) (See note 2)	TC	—	750×10^{-6}/degC	—	300×10^{-6}/degC

Notes: (1) The above parameters are measured at
a flux density of ($\hat{B}$) at A_e of <0.1 mT (1 gauss)
a temperature of 25°C

(2) TC is quoted for guidance only. For guaranteed material specifications see data sheet LINEAR FERRITE MATERIALS in Mullard Technical Handbook volume 6 part 2.



All dimensions in millimetres

TYPE No. FX2072 Ferroxcube grade A5

EFFECTIVE PARAMETERS

For calculating the magnetic properties, the following parameters should be used:

Parameter	Symbol	Millimetre units	Centimetre units
Effective magnetic path length	ℓ_e	22.7mm	2.27cm
Effective area of magnetic path	A_e	2.10mm^2	0.0210cm^2
Effective volume	V_e	47.6mm^3	0.0476cm^3
$\sum \frac{\ell}{A}$	C_1	10.9mm^{-1}	109cm^{-1}

For electrical and magnetic design data see page 2.

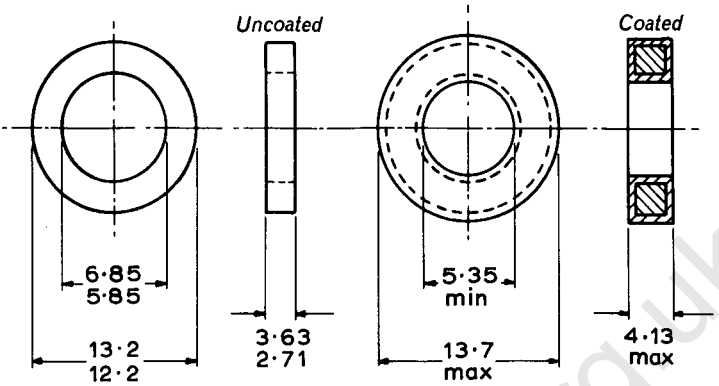
ELECTRICAL AND MAGNETIC DESIGN DATA

Parameter	Symbol	Frequency	Magnitude
Effective permeability	μ_e	<100kHz	>1000
Turns factor (Turns for 1 mH)	α	—	<93.12
Residual plus eddy current loss factor	$\frac{\tan\delta_{r+e}}{\mu_e}$	100kHz	$<12\times10^{-6}$
Typical temperature coefficient (between +25 and +50°C) (See note 2)	TC	—	1500×10^{-6}/degC

Notes: (1) The above parameters are measured at
a flux density ($\hat{B}$) at A_e of <0.1 mT (1 gauss)
a temperature of 25°C

(2) TC is quoted for guidance only. For guaranteed material specifications see data sheet LINEAR FERRITE MATERIALS in Mullard Technical Handbook volume 6 part 2.

FERROXCUBE TOROIDS 12·7mm



All dimensions in millimetres.

Type numbers		Material grade	Identification of coated types	
Uncoated	Coated		Body	Peripheral mark
FX1322	FX3007	A1	Grey	—
FX1593	FX3008	A4	Red	—
FX2691	FX3009	A5	Green	—
FX1594	FX3011	B1	White	Brown
FX1595	FX3012	B2	White	Red
FX1596	FX3013	B3	White	Orange
FX1597	FX3014	B4	White	Yellow
FX1598	FX3015	B5	White	Green

EFFECTIVE PARAMETERS

For calculating the magnetic properties, the following parameters should be used:

Parameter	Symbol	Millimetre units	Centimetre units
Effective magnetic path length	ℓ_e	27.6mm	2.76cm
Effective area of magnetic path	A_e	9.68mm^2	0.0968cm^2
Effective volume	V_e	268mm^3	0.268cm^3
$\sum \frac{\ell}{A}$	C_1	2.86mm^{-1}	28.6cm^{-1}

For electrical and magnetic design data see page 2.

ELECTRICAL AND MAGNETIC DESIGN DATA

Parameter	Symbol	Type numbers and magnitudes							
		FX1322 FX3007	FX1593 FX3008	FX2691 FX3009	FX1594 FX3011	FX1595 FX3012	FX1596 FX3013	FX1597 FX3014	FX1598 FX3015
Effective permeability	μ_e	>700	1200 to 1800	>1800	>500	200 to 400	>130	40 to 80	10 to 25
	$f=$	<500kHz	<500kHz	<100kHz	<500kHz	<2MHz	<5MHz	<10MHz	<50MHz
Turns factor (Turns for 1mH)	α	<57.01	35.56 to 43.54	<35.56	<67.46	75.42 to 106.7	<132.3	168.6 to 238.5	301.7 to 476.9
Residual plus eddy current loss factor	$\frac{\tan\delta_{r+e}}{\mu_e}$	$<50\times10^{-6}$	$<120\times10^{-6}$	$<120\times10^{-6}$	$<120\times10^{-6}$	$<200\times10^{-6}$	U/C	$<300\times10^{-6}$	$<3000\times10^{-6}$
	$f=$	450kHz	450kHz	450kHz	500kHz	2MHz	5MHz	10MHz	50MHz
Typical temperature coefficient (between +25 and +50°C) (See note 2)	TC	1200×10^{-6}/degC	2000×10^{-6}/degC	1500×10^{-6}/degC	2000×10^{-6}/degC	1800×10^{-6}/degC	1200×10^{-6}/degC	750×10^{-6}/degC	1500×10^{-6}/degC

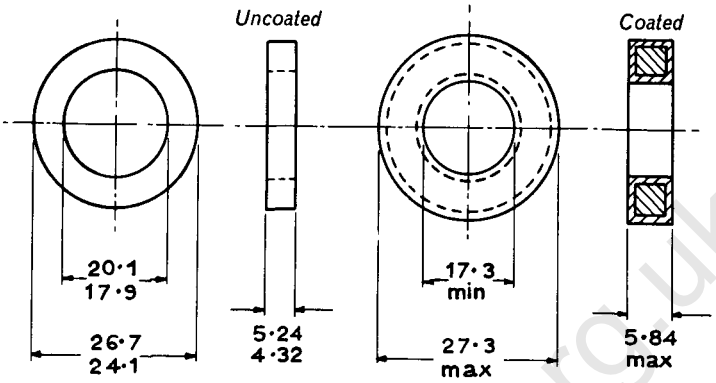
Notes: (1) The above parameters are measured at a flux density ($\hat{B}$) at A_e of <0.1mT (1 gauss) and a temperature of 25°C

(2) TC is quoted for guidance only. For guaranteed material specifications see data sheet LINEAR FERRITE MATERIALS in Mullard Technical Handbook volume 6 part 2.

(3) The Nylon coating will withstand a test voltage of 1000V d.c.

(4) U/C=under consideration.

FERROXCUBE TOROIDS 25·4mm



All dimensions in millimetres

Type numbers		Material grade	Identification of coated types	
Uncoated	Coated		Body	Peripheral mark
FX1230	FX3016	A1	Grey	—
FX1582	FX3017	A4	Red	—
FX1583	FX3018	B1	White	Brown
FX1231	FX3019	B2	White	Red
FX1299	FX3020	B3	White	Orange
FX1358	FX3021	B4	White	Yellow
FX1584	FX3022	B5	White	Green

EFFECTIVE PARAMETERS

For calculating the magnetic properties, the following parameters should be used:

Parameter	Symbol	Millimetre units	Centimetre units
Effective magnetic path length	ℓ_e	68.9mm	6.89cm
Effective area of magnetic path	A_e	15.1mm^2	0.151cm^2
Effective volume	V_e	1040mm^3	1.04cm^3
$\sum \frac{\ell}{A}$	C_1	4.57mm^{-1}	45.7cm^{-1}

For electrical and magnetic design data see page 2.

ELECTRICAL AND MAGNETIC DESIGN DATA

Parameter	Symbol	Type numbers and magnitudes						
		FX1230 FX3016	FX1582 FX3017	FX1583 FX3018	FX1231 FX3019	FX1299 FX3020	FX1358 FX3021	FX1584 FX3022
Effective permeability	μ_e	>700	>1050	>500	200 to 400	100 to 200	40 to 80	10 to 25
	$f=$	<500kHz	<500kHz	<500kHz	<2MHz	<5MHz	<10MHz	<50MHz
Turns factor (Turns for 1mH)	α	<72.08	<58.85	<85.28	95.35 to 134.8	134.8 to 190.7	213.2 to 301.5	381.4 to 603.0
Residual plus eddy current loss factor	$\frac{\tan\delta_{r+e}}{\mu_e}$	$<50\times10^{-6}$	$<120\times10^{-6}$	$<120\times10^{-6}$	$<140\times10^{-6}$	$<200\times10^{-6}$	$<300\times10^{-6}$	$<3000\times10^{-6}$
	$f=$	450kHz	450kHz	500kHz	2MHz	5MHz	10MHz	50MHz
Typical temperature coefficient (between +25 and +50°C) (See note 2)	TC	1200×10^{-6}/degC	2000×10^{-6}/degC	2000×10^{-6}/degC	1800×10^{-6}/degC	1200×10^{-6}/degC	750×10^{-6}/degC	300×10^{-6}/degC

Notes: (1) The above parameters are measured at a flux density ($\hat{B}$) at A_e of <0.1mT (1 gauss) and a temperature of 25°C

(2) TC is quoted for guidance only. For guaranteed material specifications see data sheet LINEAR FERRITE MATERIALS in Mullard Technical Handbook volume 6 part 2.

(3) The Nylon coating will withstand a test voltage of 1000V d.c.