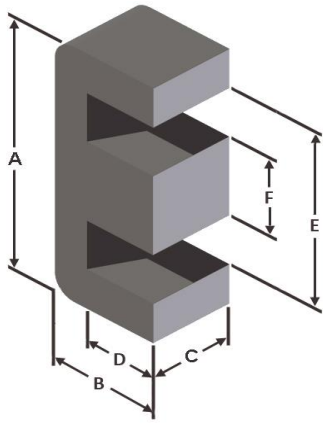


# 25.4 mm/1.000 in. E-Core



**Typical Part Number: E MS - 025 10 07 - 090**

Geometry → E  
 Material Type → MS  
 "A" Dimension in XXXmm → 025  
 "B" Dimension in XXmm → 10  
 "C" Dimension in XXmm → 07  
 Reference Permeability → 090  
 Standard Industrial Size: LAM EE-24-25

## Physical Dimensions

<b>A</b>	25.4 ± 0.38 mm	1.000 ± 0.015 in
<b>B</b>	9.5 ± 0.18 mm	0.374 ± 0.007 in
<b>C</b>	6.5 ± 0.10 mm	0.256 ± 0.004 in
<b>D</b>	6.2 mm (min.)	0.244 in (min.)
<b>E</b>	18.8 mm (min.)	0.740 in (min.)
<b>F</b>	6.2 ± 0.13 mm	0.244 ± 0.005 in

## Magnetic Dimensions

<b>Ae</b>	Effective Magnetic Cross Section	0.385 cm <sup>2</sup>
<b>Le</b>	Effective Magnetic Path Length	4.85 cm
<b>Ve</b>	Effective Core Volume	1.87 cm <sup>3</sup>
<b>WA</b>	Minimum Effective Window Area	0.773 cm <sup>2</sup>
<b>SA</b>	Surface Area	19.4 cm <sup>2</sup>
<b>MLT</b>	Mean Length Per Turn	5.06 cm

## Permeability

## Part Numbers

Reference Permeability	A <sub>L</sub> Value (nH/N <sup>2</sup> )	MS Sendust	FluxSan™ Silicon Iron
14μ	24	EMS-0251007-014	EFS-0251007-014
26μ	39	EMS-0251007-026	EFS-0251007-026
40μ	52	EMS-0251007-040	EFS-0251007-040
60μ	70	EMS-0251007-060	EFS-0251007-060
75μ	85	EMS-0251007-075	
90μ	100	EMS-0251007-090	
<b>Approximate Unit Weight:</b>		5.2 g/half	6.1 g/half

## Test Conditions

<b>Winding</b>	N=100, #24 AWG
<b>Frequency</b>	10 kHz
<b>Voltage</b>	0.17 V
<b>A<sub>L</sub> Tolerance</b>	±8%

## Coating/Packaging Information

<b>Coating Type</b>	None
<b>Voltage Breakdown</b>	N/A
<b>Limit</b>	N/A
<b>Package Quantity</b>	840 Halves/Box

## Winding Table

Wire Size	AWG	14	16	18	20	22	24	26	28	30	32	34
	mm	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160
Full Winding	Turns	15	24	37	57	89	137	213	329	509	788	1,219
	Rdc(Ω)	6.3 m	16.0 m	39.2 m	96.0 m	238.3 m	583.4 m	1.4	3.5	8.7	21.5	52.8