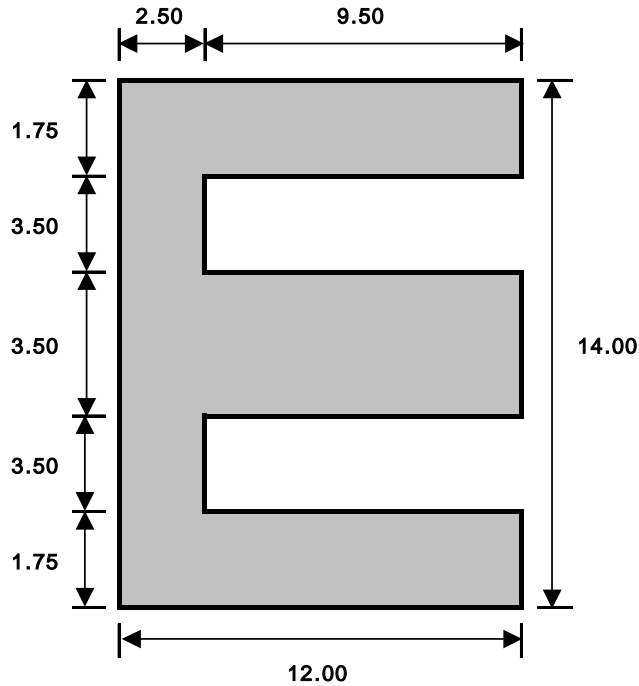




14-12E

SYEC CORE



TOLERANCE ± 0.08

PROPERTIES OF SQUARE STACK (10EA)

MAGNETIC DESIGN FORMULAE

$$B_{max} = \frac{3076 \cdot 10^3}{K_1 N} \text{ gauss per Volt at 60Hz}$$

(N is number of turns)

$$H_0 = (0.414 \cdot 10^{-3}) N \text{ Oersted per milliampere}$$

of direct current in winding

$$L = (0.0505 \cdot 10^{-8}) K_1 N^2 \mu \text{ ac Henries}$$

MAGNETIC PATH DIMENSION

$$l = 3.03 \text{ cm}$$

$$A = 0.122 \text{ cm}^2$$

K_1 (STACKING FACTOR)

| Thickness | Butt jointed | Interleaved one per layer |
|-----------|--------------|---------------------------|
| 0.1 | 0.90 | 0.80 |
| 0.2 | 0.90 | 0.85 |
| 0.35 | 0.95 | 0.90 |

| MATERIAL TYPE | THICKNESS(mm) | WEIGHT & NUMBERS | |
|---------------|---------------|------------------|--------|
| | | GRAMS/PCS | PCS/KG |
| PC (NI 80%) | 0.35T | 0.3064 | 3,264 |
| PB (NI 48%) | 0.35T | 0.2888 | 3,463 |