

ITEM OPPORTUNITY SYNOPSIS:

Supplier Scouting Number

TECHNICAL INFORMATION:	1. Describe the item:	
		Please describe the item application/ the end use of item.
	Provide the item number <u>if applicable</u>: (N95 Mask vs Protective Mask).	
	2. Summary of Technical Specifications and Performance Requirements:	a. Provide dimensions / size / tolerances / performance specifications for the item.
		b. List required materials needed to make the product, Including materials of product components, if applicable.
		c. Are there applicable certification requirements to supply this item? (i.e. ISO certification) Are there any applicable regulations that apply to the production of this item? (i.e. FDA regulations or EPA regulations) Are there any other standard requirements? (i.e. ASME Standard, IEEE Standard) Please specify.
	d. Describe the manufacturing processes (elaborate to provide as much detail as possible).	
f. Additional Comments:		
Is there other information that would impact the item's performance or usefulness? Please explain.		

BUSINESS INFORMATION:	Potential Business Volume Estimate (i.e., # Units Per Day, Month, Year):				
	Target Price / Unit Cost Information:				
Delivery Requirements:	When is it needed by? (Immediate, 30 Days, 6 months, etc.)				
	Describe packaging requirements (i.e., individually/ group packaging).				
	Where is this opportunity located? Is there a preferred shipping proximity - if applicable?				
Additional Comments:	How long would you like to leave this opportunity open to the National Network?				
	<input type="checkbox"/> 3 days	<input type="checkbox"/> 5 days	<input type="checkbox"/> 7 days	<input type="checkbox"/> 10 days	<input type="checkbox"/> Other
	Is there other information you would like to include?				

Photos or diagrams of the item (helpful but not required).

FERRIMAG 7B TECHNICAL DATA

NOMINAL MAGNETIC PROPERTIES

Br	(RESIDUAL INDUCTION)	3800 Gauss	380 mTesla
Hc	(COERCIVE FORCE)	3500 Oersteds	275 kA/m
Hci	(INTRINSIC COERCIVE FORCE)	4000 Oersteds	315 kA/m
BHmax	(MAXIMUM ENERGY PRODUCT)	3.3 x 10 ⁶ GDe	26.2 kJ/m ³
OPERATING POINT FOR MAXIMUM ENERGY PRODUCT			
Bo		1900 Gauss	190 mTesla
Ho		1750 Oersteds	140 kA/m
PERMEANCE COEFFICIENT AT Bo/Ho			
REVERSIBLE PERMEABILITY		1.08	
(RECOIL PERMEABILITY, u rev)		1.05 - 1.07	
REVERSIBLE TEMPERATURE COEFFICIENT OF Br			
		-0.20%/°C (-60° TO 100° C)	
REVERSIBLE TEMPERATURE COEFFICIENT OF INTRINSIC COERCIVE FORCE			
		+0.35%/°C (-60° TO 100° C)	

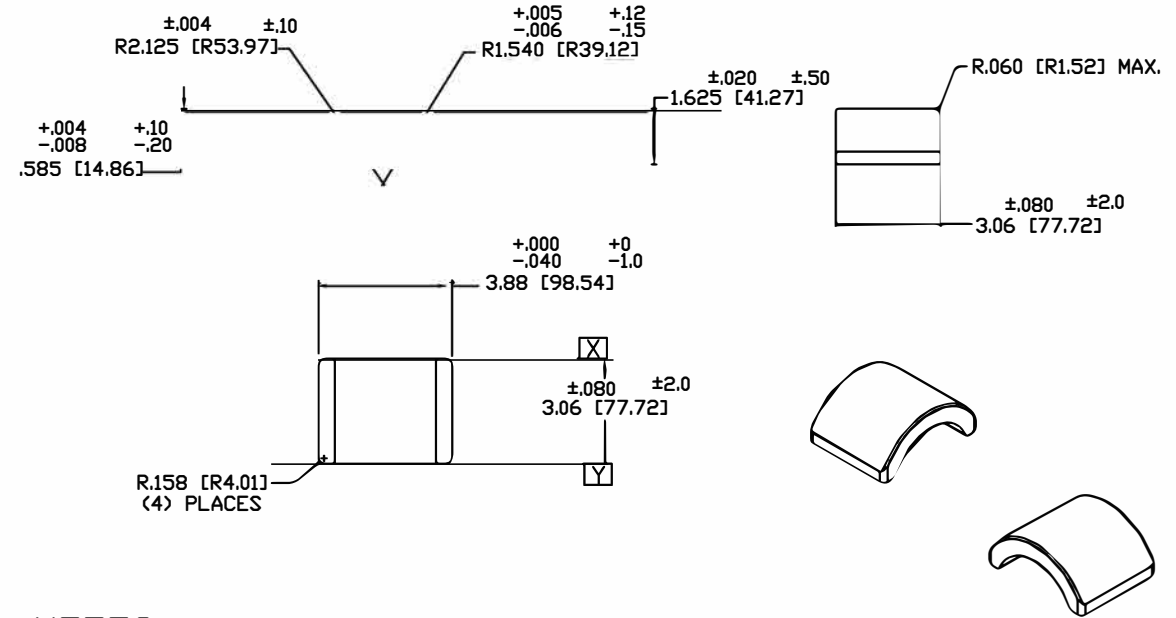
TYPICAL PHYSICAL PROPERTIES

NOMINAL CHEMICAL COMPOSITION			
Sr _{0.6} Fe ₂ O ₃			
DENSITY	.174 lbs./in ³	4.8 g/cm ³	
CURIE TEMPERATURE	842 °F	450 °C	
RECOMMENDED MAXIMUM OPERATING TEMPERATURE	480 °F	250 °C	
SPECIFIC HEAT	715 - 835 J/kg°C		
THERMAL CONDUCTIVITY	4.5 W/m°C		
COEFFICIENT OF LINEAR EXPANSION			
(25°C TO 200°C)	10 X 10 ⁻⁶ /°C ⊥ TO ORIENTATION		
	14 X 10 ⁻⁶ /°C TO ORIENTATION		
ELECTRICAL RESISTIVITY			
	>10 ⁶ Ohm*cm		

MECHANICAL PROPERTIES

YOUNG'S MODULUS	2.5 X 10 ⁷ lbs./in ²	1.7 X 10 ¹¹ N/m ²
COMPRESSIVE STRENGTH	2.0 X 10 ⁵ lbs./in ²	1.3 X 10 ⁹ N/m ²
TENSILE STRENGTH	4.0 X 10 ³ lbs./in ²	2.7 X 10 ⁷ N/m ²
FLEXURAL STRENGTH	9.0 X 10 ³ lbs./in ²	6.2 X 10 ⁷ N/m ²

MOST PERMANENT MAGNET MATERIALS ARE A CLASS OF MATERIALS THAT LACK DUCTILITY AND ARE INHERENTLY BRITTLE. SUCH MATERIALS SHOULD NOT BE DESIGNED AS STRUCTURAL COMPONENTS IN A CIRCUIT. MEASUREMENT OF SUCH PROPERTIES AS HARDNESS AND TENSILE STRENGTH ARE NOT FEASIBLE ON COMMERCIAL MATERIALS WITH THESE INHERENT CHARACTERISTICS. THEREFORE, SPECIFICATIONS OF THESE PROPERTIES ARE NOT ACCEPTABLE. THE EXTREME HARDNESS OF THESE MATERIALS MAKES MACHINING IMPRACTICAL EXCEPT BY THE USE OF ABRASIVE GRINDING METHODS.



NOTES:

1. VISUAL IMPERFECTIONS NOT AFFECTING MAGNET PERFORMANCE WILL BE ACCEPTABLE.

MATERIAL SPECIFICATIONS (SEE ATTACHED DATA SHEETS FOR ADDITIONAL SPECS)		
	NOMINAL VALUES	
	CHINA (GRADE FM-7B)	TDK (GRADE M-9) PART #Q1282B436C
Br	3800 GAUSS (NOM)	3700 GAUSS (NOM)
Hc	3500 OERSTEDS (NOM)	3425 OERSTEDS (NOM)
Hci	4000 OERSTEDS (NOM)	4200 OERSTEDS (NOM)
BHmax.	3.3 x 10 ⁶ GAUSS-OERSTEDS (NOM)	3.2 x 10 ⁶ GAUSS-OERSTEDS (NOM)

2. PART MUST PASS THROUGH A GAGE WITH AN OUTSIDE RADIUS OF 2.129, AN INSIDE RADIUS OF 1.545, AND AN OPENING OF 3.884. MINIMUM LENGTH OF GAGE TO BE 3.140. GAGE MUST ALLOW FLAT LEG TIP.
3. BACK FLATNESS NOT TO EXCEED .010 TOTAL.
4. MAGNETIC CERTIFICATION REQUIRED WITH EACH SHIPMENT.
5. RADIAL ORIENTATION REQUIRED.
6. SURFACES X & Y TO BE PARALLEL TO EACH OTHER WITHIN .030.

UNLESS OTHERWISE SPECIFIED:
TOLERANCES:
FRACTIONAL: ±1/64"
ANGULAR: ±30'
ONE PLACE DECIMAL: ±.020"
TWO PLACE DECIMAL: ±.010"
THREE PLACE DECIMAL: ±.005"

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF CURRENT APPLICATIONS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF CURRENT APPLICATIONS IS PROHIBITED.

PROJECT NUMBER: 1192

	NAME	DATE
DRAWN	CG	12/7/10
CHECKED		
DATE STAMP		

PART USED ON MODEL NUMBER:

WWW.CURRENTAPPS.COM

MATERIAL:

275 BELLEW AVENUE SOUTH
WATERTOWN, NY 13601
PHONE: (315) 788-4689
FAX: (315) 788-4693

TITLE: **(B)** CERAMIC ARC

SIZE: **(A)** DWG. NO. 20816-13 REV **B**

SCALE: 1:1 WEIGHT: SHEET 1 OF 1

REV	ECN	REVISION RECORD	BY	DATE	CHK'D
B	1711	UPDATED PRINT	TR	4/2/12	
A	1579	NEW ISSUE	TR	12/7/10	