

**ITEM OPPORTUNITY SYNOPSIS:**

Motor Commutator

2021-002

Supplier Scouting Number

<b>TECHNICAL INFORMATION:</b>	<b>1. Describe the Item:</b>	
		<b>Please describe the item application/ the end use of item.</b>
		Commutator, used on all brush motor armatures for electric motors.
	<b>Provide the item number if applicable: (N95 Mask vs Protective Mask).</b>	
	N/A	
	<b>2. Summary of Technical Specifications and Performance Requirements:</b>	<b>a. Provide dimensions / size / tolerances / performance specifications for the item.</b>
		Please see the attached engineering drawing for detailed specifications.
		<b>b. List required materials needed to make the product, Including materials of product components, if applicable.</b>
		Commutators are made of copper and molding material. Some are also made of copper, steel and mica. Typically all commutators must be tooled.
		<b>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.</b>
Must comply with Underwriter's Laboratory (UL) standards for electric motors.		
<b>d. Describe the manufacturing processes (elaborate to provide as much detail as possible).</b>		
Copper bars are stamped and formed. Commutator is either molded or assembled and pressed together. Each different commutator has its own tool or mold.		
<b>f. Additional Comments:</b>		
<b>Is there other information that would impact the item's performance or usefulness? Please explain.</b>		

<b>BUSINESS INFORMATION:</b>	<b>Potential Business Volume Estimate (i.e., # Units Per Day, Month, Year):</b>				
	Company uses approximately 25 different commutators. Annual usage in total is 250,000 pcs.				
	<b>Target Price / Unit Cost Information:</b>				
	Flexible and negotiable.				
	<b>Delivery Requirements:</b>	<b>When is it needed by? (Immediate, 30 Days, 6 months, etc.)</b>			
		Presently, the company buys from China and would like to by from a USA supplier.			
<b>Describe packaging requirements (i.e., individually/ group packaging).</b>					
Boxes on a skid					
<b>Where is this opportunity located? Is there a preferred shipping proximity - if applicable?</b>					
Deliveries expected to be made to company's location in Watertown, NY.					
<b>Additional Comments:</b>	<b>How long would you like to leave this opportunity open to the National Network?</b>				
	<input type="checkbox"/> 3 days	<input type="checkbox"/> 5 days	<input type="checkbox"/> 7 days	<input checked="" type="checkbox"/> 10 days	
	<input type="checkbox"/> Other				
	<b>Is there other information you would like to include?</b>				

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



**NOTES:**

1. 42 BAR MICA MOLDED COMMUTATOR.
2. O.D. TO BE CONCENTRIC TO I.D. WITHIN .005.
3. ENDS TO BE PERPENDICULAR TO BORE WITHIN .005.
4. ELECTRICAL TEST BAR TO BAR @ 250 VOLTS.
5. ELECTRICAL TEST BAR TO GROUND @ 2,000 VOLTS.
6. SPIN TEST @ 25,000 RPM @ 350°F FOR 30 SECONDS.
7. MAX. BAR SKEW - .010.
8. MAX. BAR MOVEMENT - .0002.
9. MAX. DISTORTION - .0005.
10. COMMUTATOR DESIGN MUST ACCEPT OTHER BORE DIAMETERS; AS LISTED, FOR FUTURE DESIGNS.
11. TOTAL OF .078 (2 MM) MIN. INSULATION BETWEEN COMMUTATOR SEGMENTS (BARS) AND STEEL BUSHING OR SHAFT BETWEEN LIVE PARTS AND DEAD METAL BY HITACHI CHEMICAL OF JAPAN (#CP-7010)
12. THE MODEL# AND THE MANUFACTURER OF THE COMMUTATOR SUPPORT USED (SEE NOTE 10); MUST LABELLED ON THE OUTSIDE OF THE BOX.
13. MATERIAL CERTIFICATIONS ARE REQUIRED WITH EACH SHIPMENT. MATERIAL SPECS AVAILABLE UPON REQUEST.

**B**

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**A**

UNLESS OTHERWISE SPECIFIED: TOLERANCES: FRACTIONAL: ± 1/64" ANGULAR: ± 30' ONE PLACE DECIMAL: ± .020" TWO PLACE DECIMAL: ± .010" THREE PLACE DECIMAL: ± .005"		NAME	DATE	MATERIAL: WWW
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.		BB	5/6/19	
PART USED ON MODEL NUMBER:				
PROJECT NUMBER: 1383				

REV	ECON	NEW ISSUE	BB	6/25/19	CHKD
A	2581	NEW ISSUE	BB	6/25/19	
REVISION RECORD					
5					
4					
3					