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RA50R0-20-8X

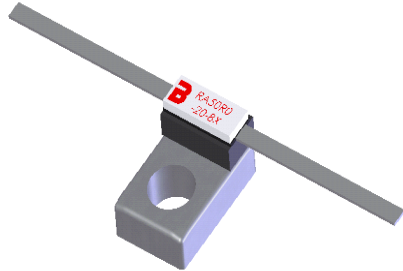


Aluminum Nitride

FLANGED RESISTOR

Features:

- ◆ Aluminum Nitride Material
- ◆ 20 Watt Input Power
- ◆ Flange Mount

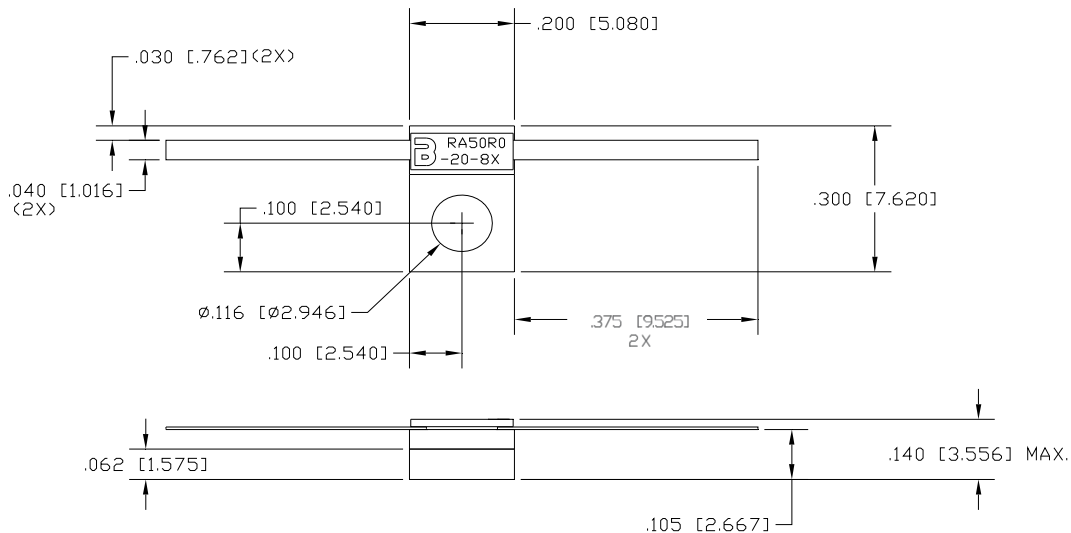
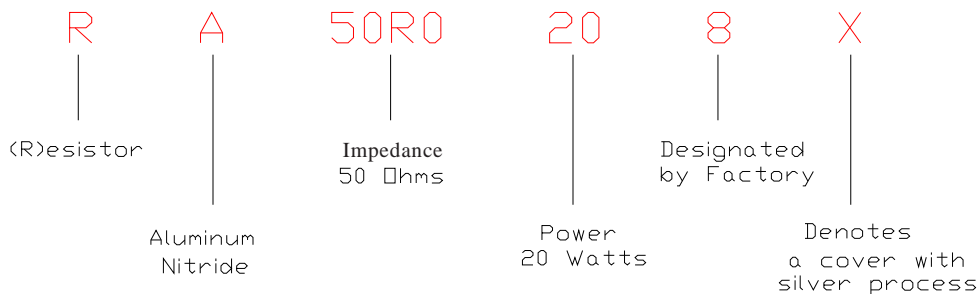


General Description:

The RA50R0-20-8X is a flanged, 50 ohm Aluminum Nitride resistor. It offers an input power rating of 20 watts, while maintaining a constant flange temperature of 100°C.

Storage conditions: Parts should be left in supplied packaging and kept in a dry nitrogen cover gas to prevent oxidation.

Warranty: 1 year from shipment; storage as specified.



Barry Industries reserves the right to change part number and or process without notification.

Barry Industries, Inc., 60 Walton St., Attleboro, MA 02703 T: 508-226-3350 F: 508-226-3317 E-mail: sales@barryind.com
 Barry Industries maintains an ISO 9001 Certified Quality Management System

Origination Date	Revision Date	Rev.
03/04/10	11/16/11	B
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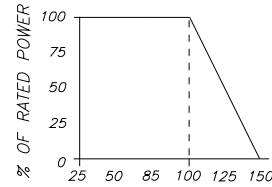
Electrical

Parameter	Min.	Typ.	Max.	Units
Resistance	47.5	50	52.5	Ohms
Input Power			20	Watts

Temperature

Parameter	Min.	Typ.	Max.	Units
Flange Temperature			100	°C
Operating Temperature Range	-55		150	°C

DERATING CURVE:



FLANGE TEMPERATURE-°C

Reliability

Parameter	Test Conditions	Results
Short Time Overload	Apply 1.1 x rated power for 5 Sec.	± 5.0 % Resistance Shift
Rated Load Life	Apply half power under 40°C ± 2°C 90 minutes on / 30 minutes off, Repeat for 100 hours	± 5.0 % Resistance Shift
Moisture Load Life	Apply half power under 60°C ± 2°C 90 - 95 % RH 90 minutes on / 30 minutes off, Repeat for 1000 hours	± 5.0 % Resistance Shift
Solder resistance	Dip into 235°C ± 5°C solder bath for 3 ± 0.5 second	± 5.0 % Resistance Shift
Terminal Strength	Lead pull 1 lb. for 5 Sec.	No Significant Abnormality (Visual)
Solderability	Dip into 235°C ± 5°C for 3 ± 0.5 seconds	>95% covered
Insulation	Apply DC 500 V for 1 Minute	>1000Mohm
High Temperature Storage	1.) 125°C ± 2°C 2.) 500 Hours	1.) Resistance shift ±5.0% 2.) No Significant Abnormality (Visual)
Thermal Shock	1.) -5°C to +150°C 2.) Each cycle 30 minutes for 5 cycles	1.) Resistance shift ±5.0% 2.) No Significant Abnormality (Visual)

Special handling: Use this component under surface temperature of 250°C on resistance film.

Outgoing Inspection:

- 1.) Electrical Characteristics
 - a.) DC Resistance (constant current measurement) verify value and tolerance per Electrical table above
100% inprocess / sample per Inspection Standard at outgoing
 - b.) TCR (Temperature Coefficient of Resistance) One sample per manufacturing lot
 - c.) VSWR sample 4 pieces per manufacturing lot (when specified in product specification)
- 2.) Visual Characteristics
 - a.) Damage / Workmanship - Sample per Inspection Standard
 - b.) Contamination - Sample per Inspection Standard
 - c.) Dimensions - Sample per Inspection Standard, verify tolerance within limits as specified on page 1.

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Packaging

These units will be shipped in segregated compartments sized for each individual assembly therefore protecting parts during shipping (See Fig. 1) 20 pcs.max per package.

Each tray bottom will then be secured to cover and labeled. (See Fig.2)

Fig. 1.

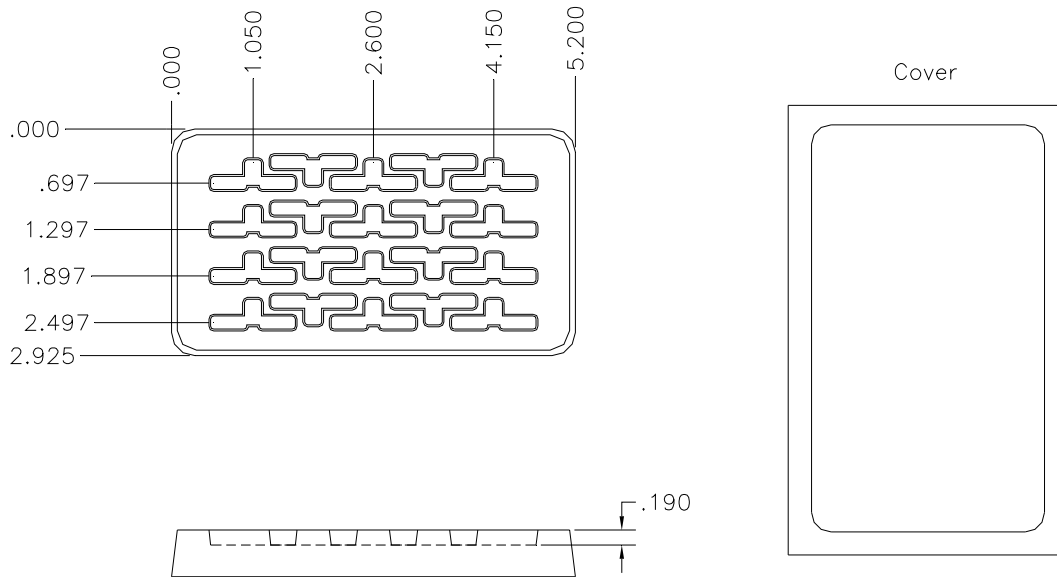


Fig. 2 (Label)

Barry Industries Inc.
P.O. BOX 1326 CAGE CODE # 6P825
Attleboro Falls, MA 02763
TEL: (508) 226-3350 FAX: (508)226-3317

PART NO.
RA50R0-20-8X

QTY. **LOT CODE**
XXXXX XXXX

CUSTOMER PART NO.
XXXXXXXXXXXXXXXXXX

DATE CODE
XXXX

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