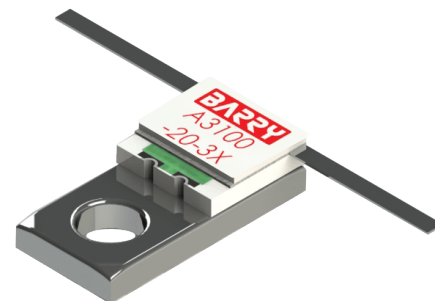


### A3100-20-3X Features:

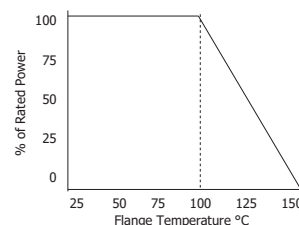
- Flange Mount
- RoHS Compliant
- Customer Defined Testing Available
- High Rated Power
- Covered Resistive Element
- Symmetrical Design<sup>1</sup>

### A3100-20-3X Parameters:

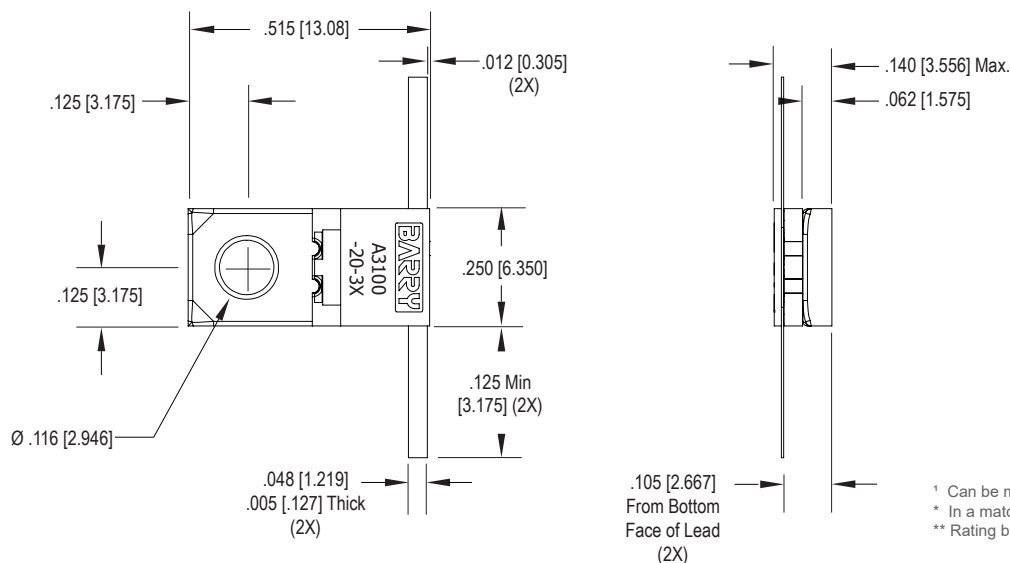
Nominal Attenuation:	31dB
Operating Frequency:	DC - 1GHz
Attenuation Tolerance:	-3dB +1dB
Return Loss (Typical)*:	20dB or Better
Input Power:	20W**
Impedance:	50Ω
Resistor Construction:	Thick Film on BeO
Flange Construction:	Silver Plated Copper
Lead Construction:	Silver Plated Copper
Operating Temperature:	-55 to +150°C



### A3100-20-3X Power Derating Curve



### A3100-20-3X Dimensions:



Dimensions in inches [mm]  
Tolerance is  $\pm 0.010$  [0.254]  
unless otherwise stated

- <sup>1</sup> Can be mounted in either direction  
<sup>\*</sup> In a matched, continuous 50Ω system with proper workmanship  
<sup>\*\*</sup> Rating based on  $\leq 100^\circ\text{C}$  constant baseplate temperature

### Ordering Information:

<b>A</b>	<b>3100</b>	<b>-</b>	<b>20</b>	<b>-</b>	<b>3X</b>
Prefix for Flanged Attenuator	Value Code 3100 - 31dB		Input Power 20 - 20W		Assigned by Factory

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

## A3100-20-3X Reliability Data:

Parameter:	Test Condition:	Results:
Short Time Overload	Apply 1.1x Rated Power for 5 Seconds.	≤ 5.0% Resistance Shift
Rated Load Life	Apply 1/2 Power Under 40°C ±2°C 90 Minutes on/ 30 Minutes off. Repeat for 100 hours	≤ 5.0% Resistance Shift
Moisture Resistance	MIL-PRF-55342 para.4.8.9 95% RH, 25°C - 65°C	≤ 5.0% Resistance Shift
Resistance to Soldering Heat (Lead)	MIL-STD-202 Method 210 Test Condition "A"	≤ 5.0% Resistance Shift
Resistance to Soldering Heat (Assembly)	MIL-STD-202 Method 210 Test Condition "J"	≤ 5.0% Resistance Shift
Terminal Strength	MIL-STD-202 Method 211 Test Condition "A" 3lbs. Test Condition "B" 5 bends	No Significant Abnormality (Visual)
Solderability (Lead only)	MIL-STD-202 Method 208 Test C	>95% Covered
High Temperature Storage	125°C ±2°C for 500 Hours	1.) ≤ 5.0% Resistance Shift 2.) No Significant Abnormality (Visual)
Thermal Shock	-5°C to +150°C 30 Minutes Dwell, 5 Cycles	1.) ≤ 5.0% Resistance Shift 2.) No Significant Abnormality (Visual)

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