

Specification	AXR135	Rev.: 2	Date: 2015-04-28
Type:	Temperature-Stabilized Precision Resistor		

Parameter	min.	typ.	max.	Unit	Condition
Temperature Stability					
Internal precision resistor (Note 1)	5	1k	125k	Ω	Vishay FRSM 1206
Internal stabilized temperature		+60		°C	
Operating temperature range (Note 2)	-40		+40	°C	
Warm-up time @ +25°C		1		min	$\Delta R_{\text{final}}/R_{\text{final}} < \pm 10 \text{ ppm}$
Supply voltage V_s	4.75	5.0	5.25	V	
Current consumption (steady state)		50		mA	@ +25°C
Current consumption (warm-up)			150	mA	
Enclosure (see drawing) (LxWxH)	12.7x12.7x5.1 max.			mm	IEC 60679-3 CO 21
Weight			5	g	
Packing	Tube or Pallet				IEC 60286-3

Notes:

1. Vishay Ultra Precision FRSM-Series in R1206 package
2. Other operating temperature ranges on request

Absolute Maximum Ratings

Parameter	min.	max.	Unit	Condition
Supply Voltage V_s	-0.5	$V_s + 10\%$	V	V_s to GND
Storage Temperature	-55	+105	°C	

Ordering Code

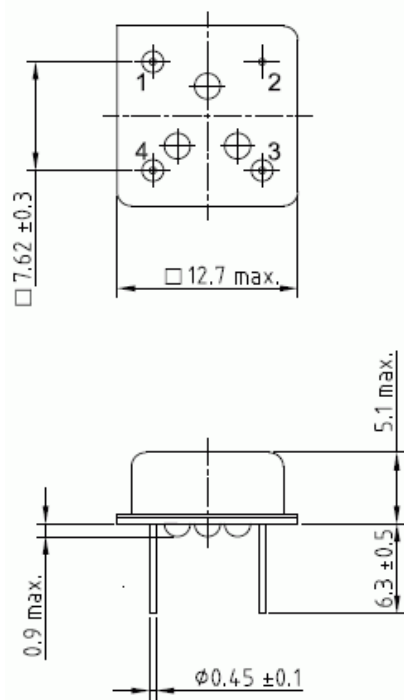
Model	Revision	Resistance [Ohm]
AXR135	Rev.2	5R to 125k

Example: AXE135_Rev.1 – 1k

Handling and Testing

Parameter	Procedure		Source
Handling and Testing	Application Note AXAN-011		www.axtal.com
Processing	Application Note AXAN-012		www.axtal.com
Parameter	Procedure		Condition
Electrostatic discharge (ESD)			
THD devices	IEC60749-26	HBM	2000 V
SMD devices	IEC60749-27	MM	200 V
Washable	✘ Yes ☐ No		
RoHS compliant	✘ Yes ☐ No		

Enclosure drawing



Pin connections

Pin #	Symbol	Function
1	RA	Resistor Pin 1
2	GND	Ground
3	V _s	Supply Voltage
4	RB	Resistor Pin 2

Environmental conditions

Test	IEC 60068 Part ...	IEC 60679-1 clause ...	Test conditions
Sealing tests	2-17	4.6.2	Gross leak: Test Qc
Solderability	2-20	4.6.3	Test Ta (235 ± 5)°C Method 1
Resistance to soldering heat	2-58		Test Tb Method 1A, 5s
Shock	2-27	4.6.8	Test Ea, 3 x per axes 100g, 6 ms half-sine pulse
Vibration, sinusoidal	2-6	4.6.7	Test Fc, 30 min per axes, 10 Hz - 55 Hz 0,75mm; 55 Hz - 2 kHz, 10g

Other environmental conditions on request

Data sheet is for information purposes only and may be subject to modifications or may be discontinued without notice.

Revision History

Rev.	Drawing	Date [dd.mm.yyyy]	Remarks	Author	Checked
1	D0	23.01.2014	First issue	HH	BN
2	D0	10.03.2015	Warm-up current changed, resistance added to order code	HH	BN
2	D1	28.04.2015	Warm-up condition added	HH	HH