

AMI TYPE

MULTILAYER CHIP INDUCTOR

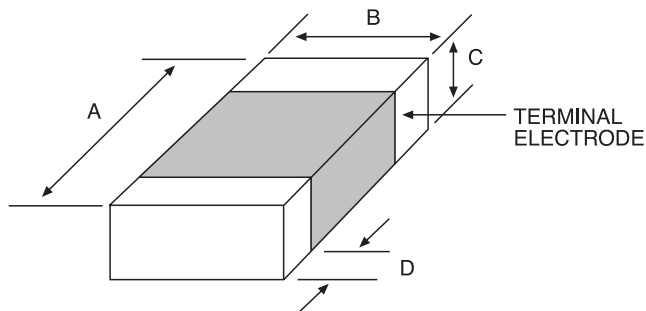


PRODUCT IDENTIFICATION

AMI - **160808** - **R10** **K**
 1 2 3 4

- 1) PRODUCTS SYMBOL
- 2) DIMENSION
- 3) INDUCTANCE
- 4) TOLERANCE J=±5%, K=±10%, M=±20%

SHAPE & DIMENSION



Dimension in mm (inch)

| PART NO. | A | B | C | D |
|-------------------|---------------|---------------|---------------|---------------|
| AMI-160808 | 1.6±0.15 | 0.8±0.15 | 0.8±0.15 | 0.3±0.20 |
| (0603) | (0.036±0.006) | (0.031±0.006) | (0.031±0.006) | (0.012±0.008) |
| AMI-201209 | 2.0±0.20 | 1.2±0.20 | 0.9±0.20 | 0.5±0.30 |
| (0805) | (0.079±0.008) | (0.047±0.008) | (0.035±0.008) | (0.020±0.012) |
| AMI-201212 | 2.0±0.20 | 1.2±0.20 | 1.2±0.20 | 0.5±0.30 |
| (0805) | (0.079±0.008) | (0.047±0.008) | (0.047±0.008) | (0.020±0.012) |
| AMI-321611 | 3.2±0.20 | 1.6±0.20 | 1.1±0.20 | 0.5±0.30 |
| (1206) | (0.126±0.008) | (0.063±0.008) | (0.043±0.008) | (0.020±0.012) |



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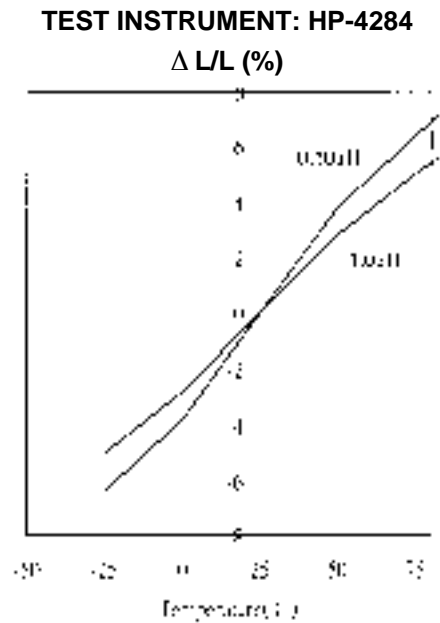
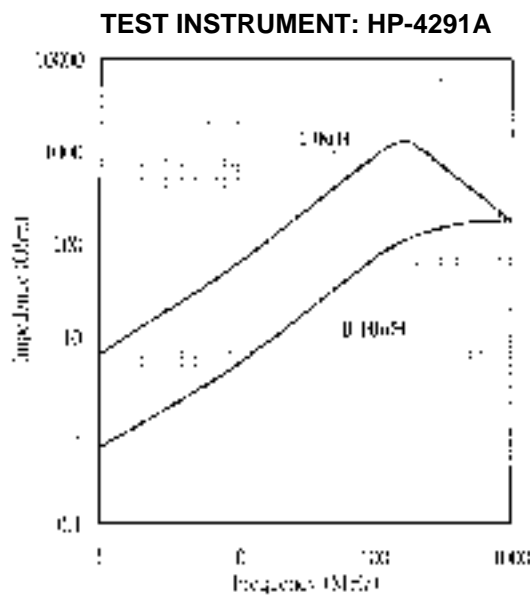
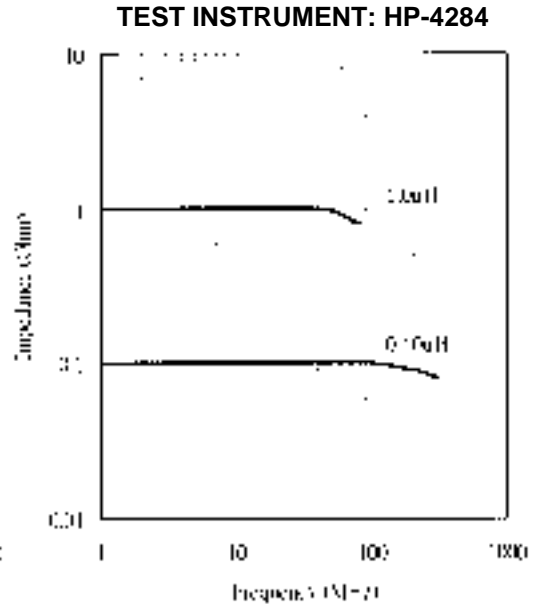
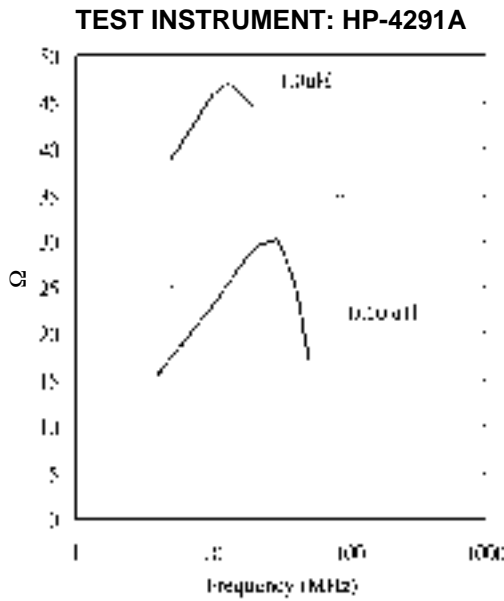
ELECTRICAL CHARACTERISTIC

Tolerance J=±5%, K=±10%, M=±20%

| Part Number | Inductance (μ H) | Q Min. | LQ Test | Self Resonant | DC Resistance | Rated Current |
|----------------|--------------------------|-----------|--------------------|-------------------------|--------------------------|------------------|
| | | | Frequency (MHz) | Frequency (MHz) Min. | Rdc (Ω) Max. | Idc (mA) Max. |
| AMI-160808-47N | 0.047±20% | 10 | 50 | 260 | 0.30 | 50 |
| AMI-160808-68N | 0.068±20% | 10 | 50 | 250 | 0.30 | 50 |
| AMI-160808-82N | 0.082±20% | 10 | 50 | 245 | 0.30 | 50 |
| AMI-160808-R10 | 0.10 | 15 | 25 | 240 | 0.50 | 50 |
| AMI-160808-R12 | 0.12 | 15 | 25 | 205 | 0.50 | 50 |
| AMI-160808-R15 | 0.15 | 15 | 25 | 180 | 0.60 | 50 |
| AMI-160808-R18 | 0.18 | 15 | 25 | 165 | 0.60 | 50 |
| AMI-160808-R22 | 0.22 | 15 | 25 | 150 | 0.80 | 50 |
| AMI-160808-R27 | 0.27 | 15 | 25 | 136 | 0.80 | 50 |
| AMI-160808-R33 | 0.33 | 15 | 25 | 125 | 0.85 | 35 |
| AMI-160808-R39 | 0.39 | 15 | 25 | 110 | 1.00 | 35 |
| AMI-160808-R47 | 0.47 | 15 | 25 | 105 | 1.35 | 35 |
| AMI-160808-R56 | 0.56 | 15 | 25 | 95 | 1.55 | 35 |
| AMI-160808-R68 | 0.68 | 15 | 25 | 90 | 1.70 | 35 |
| AMI-160808-R82 | 0.82 | 15 | 25 | 85 | 2.10 | 35 |
| AMI-160808-1R0 | 1.00 | 35 | 10 | 75 | 2.60 | 25 |

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TYPICAL ELECTRICAL CHARACTERISTIC CURVES



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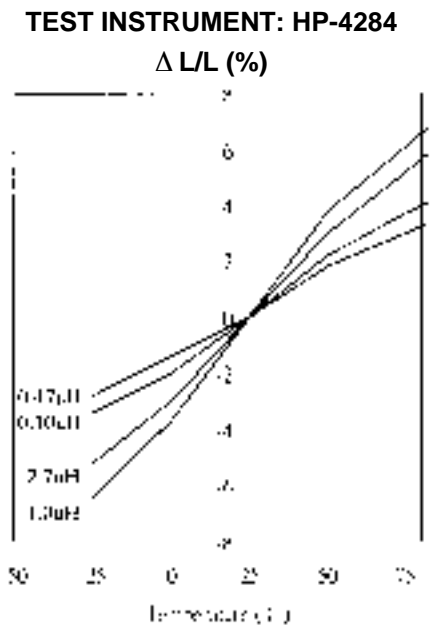
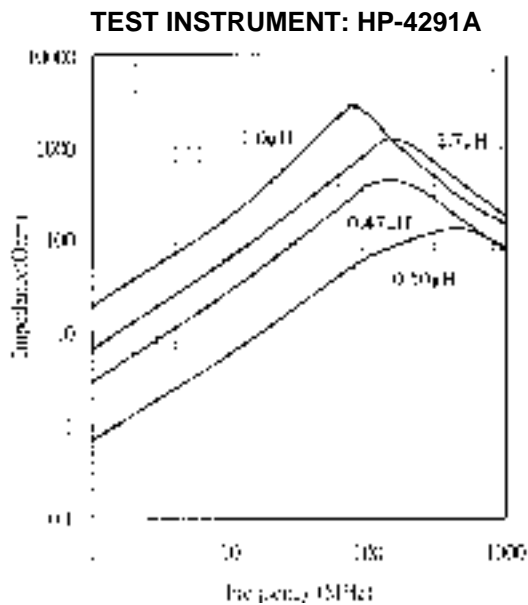
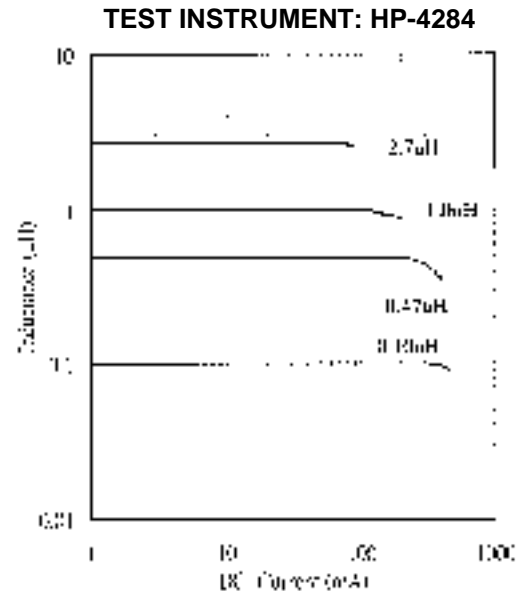
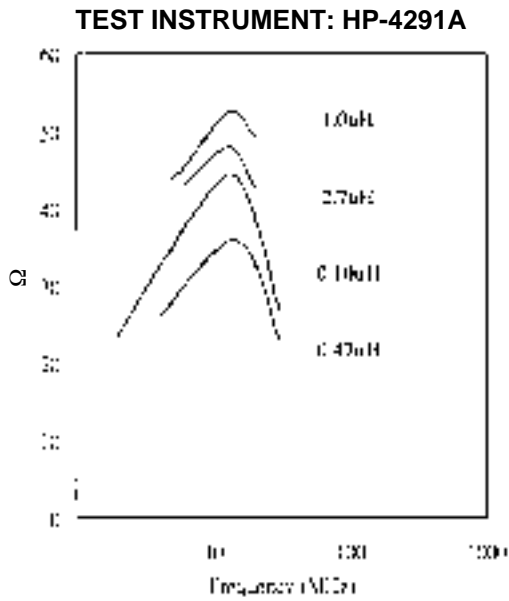
ELECTRICAL CHARACTERISTIC

Tolerance J=±5%, K=±10%, M=±20%

| Part Number | Inductance (μ H) | Q Min. | LQ Test | Self Resonant | DC Resistance | Rated Current |
|----------------|--------------------------|-----------|--------------------|-------------------------|--------------------------|------------------|
| | | | Frequency (MHz) | Frequency (MHz) Min. | Rdc (Ω) Max. | Idc (mA) Max. |
| AMI-201209-47N | 0.047±20% | 15 | 50 | 320 | 0.20 | 300 |
| AMI-201209-68N | 0.068±20% | 15 | 50 | 280 | 0.20 | 300 |
| AMI-201209-82N | 0.082±20% | 15 | 50 | 255 | 0.20 | 300 |
| AMI-201209-R10 | 0.10 | 20 | 25 | 235 | 0.30 | 250 |
| AMI-201209-R12 | 0.12 | 20 | 25 | 220 | 0.30 | 250 |
| AMI-201209-R15 | 0.15 | 20 | 25 | 200 | 0.40 | 250 |
| AMI-201209-R18 | 0.18 | 20 | 25 | 185 | 0.40 | 250 |
| AMI-201209-R22 | 0.22 | 20 | 25 | 170 | 0.50 | 250 |
| AMI-201209-R27 | 0.27 | 20 | 25 | 150 | 0.50 | 250 |
| AMI-201209-R33 | 0.33 | 20 | 25 | 145 | 0.55 | 250 |
| AMI-201209-R39 | 0.39 | 25 | 25 | 135 | 0.65 | 200 |
| AMI-201209-R47 | 0.47 | 25 | 25 | 125 | 0.65 | 200 |
| AMI-201209-R56 | 0.56 | 25 | 25 | 115 | 0.75 | 150 |
| AMI-201209-R68 | 0.68 | 25 | 25 | 105 | 0.80 | 150 |
| AMI-201209-R82 | 0.82 | 25 | 25 | 100 | 1.00 | 150 |
| AMI-201209-1R0 | 1.00 | 45 | 10 | 75 | 0.40 | 50 |
| AMI-201209-1R2 | 1.20 | 45 | 10 | 65 | 0.50 | 50 |
| AMI-201209-1R5 | 1.50 | 45 | 10 | 60 | 0.50 | 50 |
| AMI-201209-1R8 | 1.80 | 45 | 10 | 55 | 0.60 | 50 |
| AMI-201209-2R2 | 2.20 | 45 | 10 | 50 | 0.65 | 30 |
| AMI-201209-2R7 | 2.70 | 45 | 10 | 45 | 0.75 | 30 |
| AMI-201209-3R3 | 3.30 | 45 | 10 | 41 | 0.80 | 30 |
| AMI-201209-3R9 | 3.90 | 45 | 10 | 38 | 0.90 | 30 |
| AMI-201209-4R7 | 4.70 | 45 | 10 | 35 | 1.00 | 30 |
| AMI-201209-5R6 | 5.60 | 50 | 4 | 32 | 0.90 | 15 |
| AMI-201209-6R8 | 6.80 | 50 | 4 | 29 | 1.00 | 15 |
| AMI-201209-8R2 | 8.20 | 50 | 4 | 26 | 1.10 | 25 |
| AMI-201209-100 | 10.00 | 50 | 2 | 24 | 1.15 | 15 |
| AMI-201212-2R7 | 2.70 | 45 | 10 | 45 | 0.75 | 30 |
| AMI-201212-3R3 | 3.30 | 45 | 10 | 41 | 0.80 | 30 |
| AMI-201212-3R9 | 3.90 | 45 | 10 | 38 | 0.90 | 30 |
| AMI-201212-4R7 | 4.70 | 45 | 10 | 35 | 1.00 | 30 |
| AMI-201212-5R6 | 5.60 | 50 | 4 | 32 | 0.90 | 15 |
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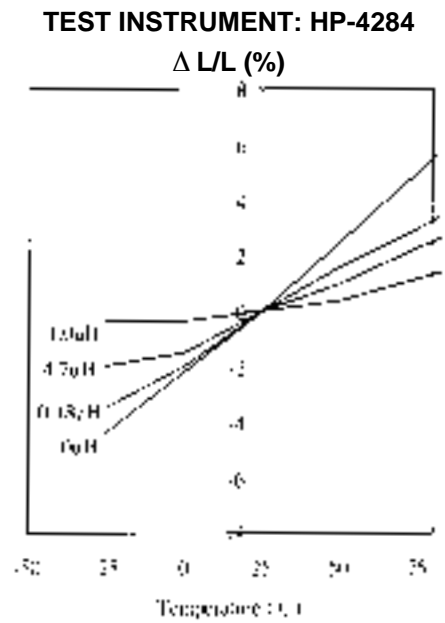
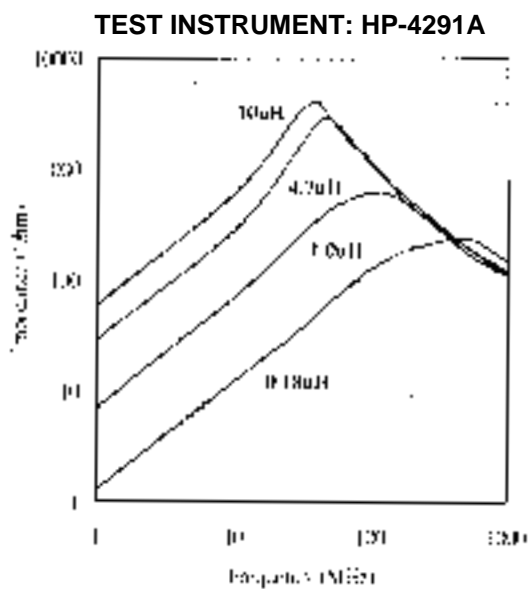
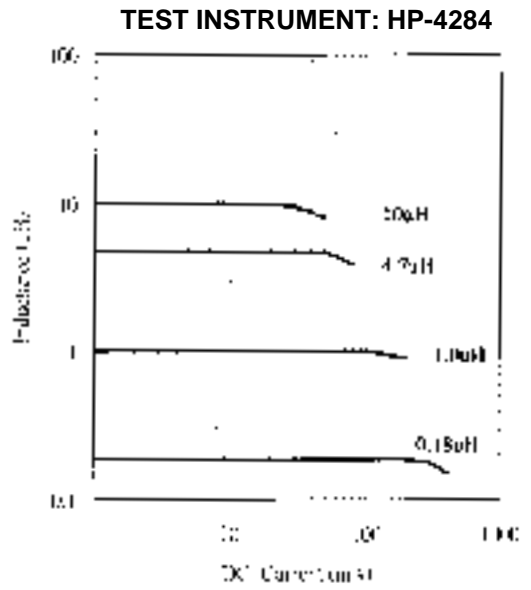
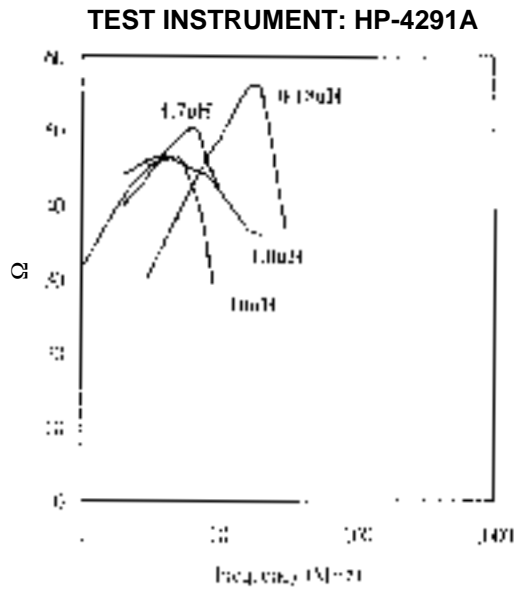
ELECTRICAL CHARACTERISTIC

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| AMI-321611-R10 | 0.10 | 20 | 25 | 235 | 0.25 | 250 |
| AMI-321611-R12 | 0.12 | 20 | 25 | 250 | 0.30 | 250 |
| AMI-321611-R15 | 0.15 | 20 | 25 | 200 | 0.30 | 250 |
| AMI-321611-R18 | 0.18 | 20 | 25 | 185 | 0.40 | 250 |
| AMI-321611-R22 | 0.22 | 20 | 25 | 170 | 0.50 | 250 |
| AMI-321611-R27 | 0.27 | 20 | 25 | 150 | 0.50 | 250 |
| AMI-321611-R33 | 0.33 | 20 | 25 | 145 | 0.60 | 250 |
| AMI-321611-R39 | 0.39 | 25 | 25 | 135 | 0.50 | 200 |
| AMI-321611-R47 | 0.47 | 25 | 25 | 125 | 0.60 | 200 |
| AMI-321611-R56 | 0.56 | 25 | 25 | 115 | 0.70 | 150 |
| AMI-321611-R68 | 0.68 | 25 | 25 | 105 | 0.80 | 150 |
| AMI-321611-R82 | 0.82 | 25 | 25 | 100 | 0.90 | 150 |
| AMI-321611-1R0 | 1.00 | 30 | 10 | 75 | 0.40 | 100 |
| AMI-321611-1R2 | 1.20 | 30 | 10 | 65 | 0.50 | 100 |
| AMI-321611-1R5 | 1.50 | 30 | 10 | 60 | 0.50 | 50 |
| AMI-321611-1R8 | 1.80 | 30 | 10 | 55 | 0.50 | 50 |
| AMI-321611-2R2 | 2.20 | 30 | 10 | 50 | 0.60 | 50 |
| AMI-321611-2R7 | 2.70 | 30 | 10 | 45 | 0.60 | 50 |
| AMI-321611-3R3 | 3.30 | 30 | 10 | 41 | 0.70 | 50 |
| AMI-321611-3R9 | 3.90 | 30 | 10 | 38 | 0.80 | 50 |
| AMI-321611-4R7 | 4.70 | 30 | 10 | 35 | 0.90 | 50 |
| AMI-321611-5R6 | 5.60 | 35 | 4 | 32 | 0.70 | 25 |
| AMI-321611-6R8 | 6.80 | 35 | 4 | 29 | 0.90 | 25 |
| AMI-321611-8R2 | 8.20 | 35 | 4 | 26 | 0.90 | 25 |
| AMI-321611-100 | 10.00 | 35 | 2 | 24 | 1.00 | 25 |
| AMI-321611-120 | 12.00 | 35 | 2 | 22 | 1.05 | 15 |
| AMI-321611-150 | 15.00 | 30 | 1 | 19 | 0.70 | 5 |
| AMI-321611-180 | 18.00 | 30 | 1 | 18 | 0.70 | 5 |
| AMI-321611-220 | 22.00 | 30 | 1 | 16 | 0.90 | 5 |
| AMI-321611-270 | 27.00 | 30 | 1 | 14 | 0.90 | 5 |
| AMI-321611-330 | 33.00 | 30 | 0.4 | 13 | 1.05 | 5 |

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ELECTRICAL CHARACTERISTIC

MECHANICAL PERFORMANCE TEST

| ITEM | SPECIFICATION | TEST CONDITION |
|--|-----------------------|---------------------------------|
| SOLDERABILITY | MORE THAN 90% OF THE | SOLDER: H63A (EUTECTIC SOLDER) |
| | TERMINAL | SOLDER TEMPERATURE: 230C ± 5°C |
| | ELECTRODE SHALL BE | FLUX: ROSIN |
| | COVERED WITH FRESH | DIP TIME: 3±1 SECONDS |
| SOLDERING HEAT RESISTANCE | SOLDER. | SOLDER: H63A (EUTECTIC SOLDER) |
| | THE CHIP SHALL NOT | SOLDER TEMPERATURE: 260C° ± 5°C |
| | CRACK. | FLUX: ROSIN |
| | MORE THAN 75% OF THE | DIP TIME: 10±1 SECONDS |
| BENDING STRENGTH | TERMINAL ELECTRODE | TYPE A (MM) KGF |
| | SHALL BE COVERED WITH | |
| | SOLDER. | AMI-160808 1.0 0.6 |
| | THE FERRITE SHALL NOT | AMI-201209/12 1.4 1.0 |
| | BE DAMAGED BY FORCES | AMI-321611 2.0 2.0 |
| APPLIED ON THE RIGHT. | | |

CLIMATIC TEST

| | | |
|---|---|--|
| THERMAL SHOCK (TEMPERATURE CYCLE) | NO MECHANICAL DAMAGE. INDUCTANCE SHALL BE WITHIN ±5% OF THE INITIAL VALUE AND Q (SHALL BE) WITHIN ± 30% OF THE INITIAL VALUE. | TEMPERATURE: -40°C, +85°C FOR 30 MINUTES EACH, 100 CYCLES |
| HUMIDITY RESISTANCE | | TEMPERATURE: +40°C HUMIDITY: 95%RH TIME: 1000 ± 12 HOURS |
| HIGH TEMPERATURE RESISTANCE | | TEMPERATURE: +85°C ± 2°C TIME: 1000 ± 12 HOURS |
| LOW TEMPERATURE RESISTANCE | | TEMPERATURE: -40°C ± 2°C TIME: 1000 ± 12 HOURS |