**FEATURES:**
- Monolithic structure designed for high reliability
- Excellent solderability and heat resistance
- Magnetic shield designed to eliminate cross coupling
- High DC current and low DCR

**APPLICATIONS:**
Choke circuits in DC power line for PC, mobile phones, digital cameras, camcorder, and music players.

**ELECTRICAL SPECIFICATIONS:**

**Operating Temperature:** -40°C to +85°C

**Storage Temperature:** -10°C to +40°C, 70% RH max

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Inductance</th>
<th>Tolerance</th>
<th>DCR</th>
<th>SRF Min.</th>
<th>Max. Rated Current</th>
<th>Tape and Reel Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASMCI-0805-R10</td>
<td>0.1 μH</td>
<td>M, N</td>
<td>0.07</td>
<td>235 MHz</td>
<td>1000 mA</td>
<td>4k</td>
</tr>
<tr>
<td>ASMCI-0805-R22</td>
<td>0.22 μH</td>
<td>M, N</td>
<td>0.13</td>
<td>170 MHz</td>
<td>800 mA</td>
<td>4k</td>
</tr>
<tr>
<td>ASMCI-0805-R47</td>
<td>0.47 μH</td>
<td>M, N</td>
<td>0.18</td>
<td>125 MHz</td>
<td>550 mA</td>
<td>4k</td>
</tr>
<tr>
<td>ASMCI-0805-1R0</td>
<td>1.0 μH</td>
<td>M, N</td>
<td>0.20</td>
<td>75 MHz</td>
<td>300 mA</td>
<td>4k</td>
</tr>
<tr>
<td>ASMCI-0805-2R2</td>
<td>2.2 μH</td>
<td>M, N</td>
<td>0.28</td>
<td>50 MHz</td>
<td>220 mA</td>
<td>4k</td>
</tr>
<tr>
<td>ASMCI-0805-4R7</td>
<td>4.7 μH</td>
<td>M, N</td>
<td>0.30</td>
<td>25 MHz</td>
<td>180 mA</td>
<td>4k</td>
</tr>
<tr>
<td>ASMCI-0805-100</td>
<td>10 μH</td>
<td>M, N</td>
<td>0.50</td>
<td>15 MHz</td>
<td>60 mA</td>
<td>3k</td>
</tr>
</tbody>
</table>

**Test Conditions**

- Ambient Temperature: 20± 15°C
- Relative Humidity: 65%±20%
- Air Pressure: 86KPa to 106KPa

**Inductance (L):** High Accuracy RF Impedance/Material Analyzer-HP4291B+HP16192A or Equivalent, 1MHz, -20dBm or 50mV.

**Direct Current Resistance (DCR):** High Accuracy Milliohmeter-HP4338B or Equivalent

**Self-Resonant Frequency (SRF):** High Accuracy RF Impedance/Material Analyzer HP4291B+HP16192A or Equivalent, -20dBm or 50mV.

**Rated current (Ir):** HP6632B system DC power supply, HP4291B+HP16192A+HP16200A or equivalent.

Definition of Rated Current (Ir): Ir is the value of DC current as inductance L (μH) decreased just 50% against initial value.
**SMD Multilayer Chip Inductor for Choke**

**PART IDENTIFICATIONS:**

| ASMCI-0805 - □ □ - □ |

- **Inductance Code:**
  - Please refer to the table above
- **Tolerance:**
  - M: ±20%
  - N: ±30%
- **Packaging:**
  - T: Tape and Reel
    - (4kpcs / reel for 0.1~4.7µH; 3kpcs / reel for 10µH)

**OUTLINE DRAWING:**

- Side View
- Top View

**DIMENSIONS:**

<table>
<thead>
<tr>
<th>L</th>
<th>W</th>
<th>T</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 (+0.3, -0.1)</td>
<td>1.25±0.2 (0.049±0.008)</td>
<td>0.85±0.2 (0.033±0.008)</td>
<td>0.5±0.3 (0.020±0.012)</td>
</tr>
</tbody>
</table>

- **Packaging:**
  - T: Tape and Reel

**MATERIALS:**

<table>
<thead>
<tr>
<th>Part Name</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Base Material</td>
<td>Ferrite</td>
</tr>
<tr>
<td>2 Internal Conductor</td>
<td>Ag</td>
</tr>
<tr>
<td>3 Pull out Electrode</td>
<td>Ag</td>
</tr>
<tr>
<td>4 Terminal Electrode</td>
<td>Ag (Inner layer) Ni-Sn (Outer layer)</td>
</tr>
</tbody>
</table>
SMD Multilayer Chip Inductor for Choke

REFLOW PROFILE:

- Preheat condition: 150 ~ 200°C / 60 ~ 120 sec.
- Allowed time above 217°C: 60 ~ 90 sec.
- Max temp: 260°C
- Max time at max temp: 10 sec.
- Solder paste: Sn/3.0Ag/0.5Cu
- Allowed Reflow time: 2x max

TAPE & REEL:

T: 4,000 pcs / reel for 0.1 ~ 4.7 μH; 3,000 pcs / reel for 10 μH

ATTENTION: Abracon Corporation’s products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon’s products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.