







## DISCRIPTION

## **FEATURES**

Ceramic Core
High frequency design
Excellent Q values
Excellent SRF
High reliability
Excellent thermal stability

## **OPTIONS**

Tape & Reel is Standard (Qty: 3.000 Pcs)
Bulk Packing Available for smaller quantites
Tolerance: J = 5% and K=10% is Standard,
tighter Tolerance available (MOQ on request)

## **APPLICATIONS**

Modems
Mobile Radios
Cordless Telephones
Global Positioning Systems
Telecommunications Systems

## PHYSICAL CHARACTERISTICS

• Testing: (Equivalents acceptable) Inductance & Q-HP4191A + HP41951

SRF: HP8753B; RDC: 25°C

Operating Temperature : Ceramic -55°C ~ 125°C
 Pad metalization : Tungsten-nickel with gold flash
 Solder methods : Wave, Reflow, Vapor Phase
 Solderability : Max 260°C for 10 seconds

• Marking : EIA color code

## **ELECTRICAL SPECIFICATIONS**

| Properties         | Test conditions |          | Value | Unit | Tol.       |
|--------------------|-----------------|----------|-------|------|------------|
| Inductance         |                 | L        | 180   | nH   | see Site 2 |
| Q factor           |                 | Q        | 50    |      | min.       |
| DC-resistance      |                 | DCR typ. |       | Ω    | typ.       |
| DC-resistance      |                 | DCR max. | 0,640 | Ω    | max.       |
| Self-Res. Freq.    |                 | SRF      | 870   | Mhz  | min.       |
| Test-Freq.         |                 |          | 250   | Mhz  |            |
| Rated Current      |                 | IDC      | 400   | mA   | max.       |
| Saturation Current |                 | Isat     |       | mA   | typ.       |

SMT WIRE-WOUND 1. This electronic component is meant to be used in general electronic equipment. Before the incorporation **CERAMIC CHIP** of this component into any equipment with higher and more reliable requirements such as aviation, aerospace, submarine, nuclear control, transportation, transportation signal, disaster prevention, medical, **INDUCTORS** public information network, etc. or if there is a possibility of injuries or damages to the human body, Edcon -Components must be informed before the stage of design-in. Evaluation checks for safety have to be Part No .: S12003-R18 performed on each electronic components used in electrical circuits that require high safety and reliability functions. Customer: DRW: Chang CHKD

 Young
 MATL:
 Chu Chi
 DATE
 09.06.2009

 FINISH
 Vienna
 Sheet
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Pong

APPD:



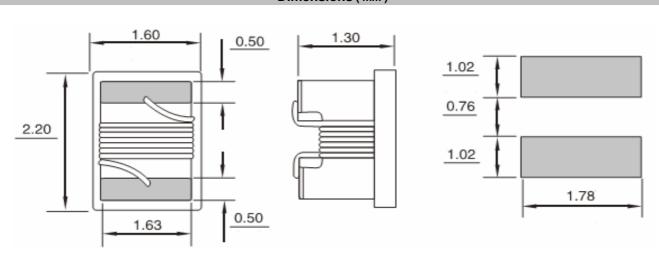






## **TECHNICAL INFORMATIONS**

## Dimensions ( mm )



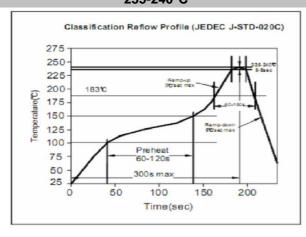
## **Ordering Information**

| Serie and Range |  |  |  |  |
|-----------------|--|--|--|--|
|                 |  |  |  |  |
| S12003-R18      |  |  |  |  |

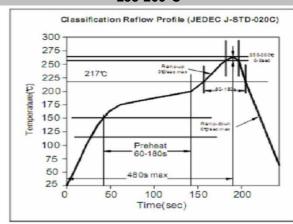
| Tolerance | ROHS | Packing |  |
|-----------|------|---------|--|
|           |      |         |  |
| K         | R    | TR      |  |

| <b>J</b> = 5%  | R = ROHS     | <b>BU</b> = Bulk Ware |
|----------------|--------------|-----------------------|
| <b>K</b> = 10% | N = non ROHS | TR = Tape Reel        |
| <b>M</b> = 20% |              |                       |
| <b>N</b> = 30% |              |                       |

# Soldering Profile for Lead Free Soldering 235-240°C



## Soldering Profile for Lead Free Soldering 255-260°C



1. This electronic component is meant to be used in general electronic equipment. Before the incorporation of this component into any equipment with higher and more reliable requirements such as aviation, aerospace, submarine, nuclear control, transportation, transportation signal, disaster prevention, medical, public information network, etc. or if there is a possibility of injuries or damages to the human body, Edcon—Components must be informed before the stage of design-in. Evaluation checks for safety have to be performed on each electronic components used in electrical circuits that require high safety and reliability

functions.

## SMT WIRE-WOUND CERAMIC CHIP INDUCTORS

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