## Resistors

# Wire Bondable Multi-tap Chip Resistors

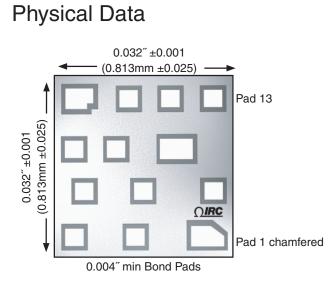
#### **WBC Series**

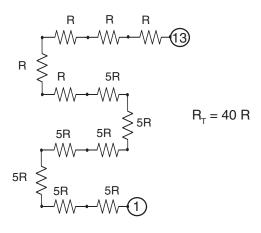
- High resistor density
- MIL inspection available
- Multi-tapped chip resistor





All parts are Pb-free and comply with EU Directive 2011/65/EU (RoHS2)





## **Electrical Data**

Absolute Tolerance		to ±5%	
Absolute TCR		to ±25ppm/°C	
Package Power Rating (@ 70°C)		250mW	
Rated Operating Voltage (not to exceed $\sqrt{P x R}$ )		100V	
Operating Temperature		-55°C to +150°C	
Noise		<-30dB	
Substrate Material		Oxidized Silicon (10KÅ SiO <sub>2</sub> minimum)	
Substrate Thie	ckness	0.010″ ±0.001 (0.254mm ±0.025)	
Bond Pad	Aluminum	10KÅ minimum	
Metallization	Gold	15KÅ minimum	
Backside		Silicon (gold available)	
Passivation		Silicon Dioxide or Silicon Nitride	

#### General Note

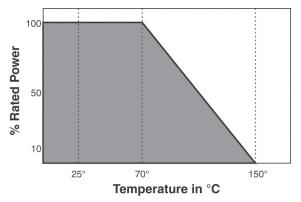
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www.ttelectronicsresistors.com





Power Derating Data



## TCR/Inspection Code Table

Absolute TCR	Commercial Code	MIL Inspection Code*
±300ppm/°C	00	04
±100ppm/°C	01	05
±50ppm/°C	02	06
±25ppm/°C	03	07

\*Notes: Product supplied to Class H of MIL-PRF 38534 include 100% visual inspection

#### **Environmental Data**

Test	Method	Max ∆R	Typical ∆R
Thermal Shock	MIL-STD-202 Method 107 Test condition F	±0.1%	±0.02%
High Temperature Exposure	MIL-STD-883 Method 1008 150°C, 1000 hours	±0.1%	±0.05%
Low Temperature Storage	-55°C, 1000 hours	±0.03%	±0.01%
Life	MIL-STD-202 Method 108 70°C, 1000 hours	±0.5%	±0.01%
Life at Elevated Temperature	MIL-STD-202 Method 108 125°C, 1000 hours	±0.5%	±0.05%

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#### **WBC Series**



## Manufacturing Capabilities Data

Resistance R Total	Available Absolute Tolerances	Best Absolute TCR
100Ω	МК	±100ppm/°C
400Ω	MKJ	±100ppm/°C
800Ω	MKJ	±100ppm/°C
2.4ΚΩ	MKJ	±50ppm/°C
8.0ΚΩ	MKJ	±50ppm/°C
24ΚΩ	МКЈ	±25ppm/°C
<b>80K</b> Ω	MKJ	±25ppm/°C

### **Ordering Data**

Prefix WBC - M0303 A S - 01 - 2402 - J
<b>Style</b>
Bonding pads · · · · · · · · · · · · · · · · · · ·
A = Aluminum; G = Gold
Backside G = Gold; S = Silicon
TCR/Inspection Code
Reference TCR/Inspection Code Table
Total Resistance = R <sub>τ</sub> 4-Digit Resistance Code   Ex: 8000 = 800Ω; 2402 = 24.0KΩ   Reference manufacturing Capabilities Data Table for available resistances
Absolute Tolerance Code

Absolute Iolerance Code  $M = \pm 20\%$ ;  $K = \pm 10\%$ ;  $J = \pm 5\%$ 

**Packaging** Standard packaging is 2" x 2" chip tray. For additional information or to discuss your specific requirements, please contact our Applications Team using the contact details below.

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