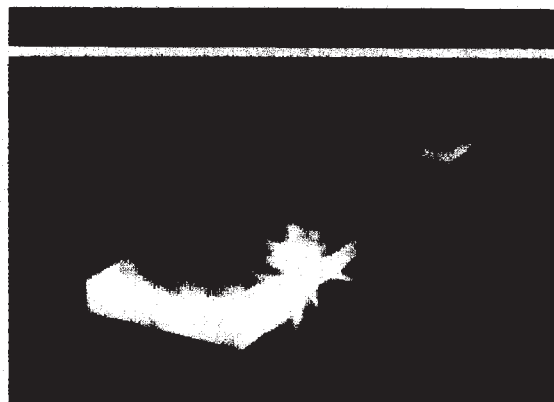


MODEL SERIES BCR

Thick Film

Chip Resistors

OBSOLETE



OUTSTANDING FEATURES

- **Seven Styles/Six Power Ratings Available** - Including the popular 0402, 0603, 0805 and 1206 versions
- **Tight Dimensional Tolerances** - Ensure reliable high yield board assembly
- **Nickel Barrier Terminations** - For long term solder joint reliability
- **Glass Passivation** - Provides superior environmental protection
- **Ruthenium Oxide Thick Film** - Chosen for accurate and stable resistors
- **Jumper Chip is Standard** - Provides <50 milliohm short

ELECTRICAL

Model	BCR1/32	BCR 1/16	BCR 1/10	BCR 1/8	BCR 1/4	BCR 1/2	BCR 1
Industry Style, Inch(mm)	0402 (1050)	0603 (1608)	0805 (2012)	1206 (3216)	1210 (3225)	2010 (5025)	2512 (6332)
Standard Resistance Tolerances	±1% (F Tolerance), ±5% (J Tolerance)						
Standard Resistance Range	10Ω to 1MegΩ F Tol. -E96 J Tol. -E24		10Ω to 1MegΩ (Plus "0 Ohm" Jumper) F Tol. -E96 J Tol. -E24			10Ω to 1MegΩ (Plus "0 Ohm" Jumper) F Tol. -E96 J Tol. -E24	
Operating Temperature Range	-55°C to +125°C						
Power Rating, Watts *	0.063 at 70°C		0.125 at 70°C	0.250 at 70°C	0.250 at 70°C	0.500 at 70°C	1.0 at 70°C
Rated Current/Peak Current, Amps **	1A / 2A		1.5A / 3A	2A / 4A			
Temperature Coefficient of Resistance	±200ppm/°C (F & J Tol.)			±100ppm/°C (F Tol.) ±200ppm/°C (J Tol.)			
Operating Voltage, Max./ Overload Voltage, Max.	50 / 100 Vdc		150 / 300 Vdc		200 / 400 Vdc		

* Not to exceed Maximum Operating Voltage. Derates to 0 at 125°C.

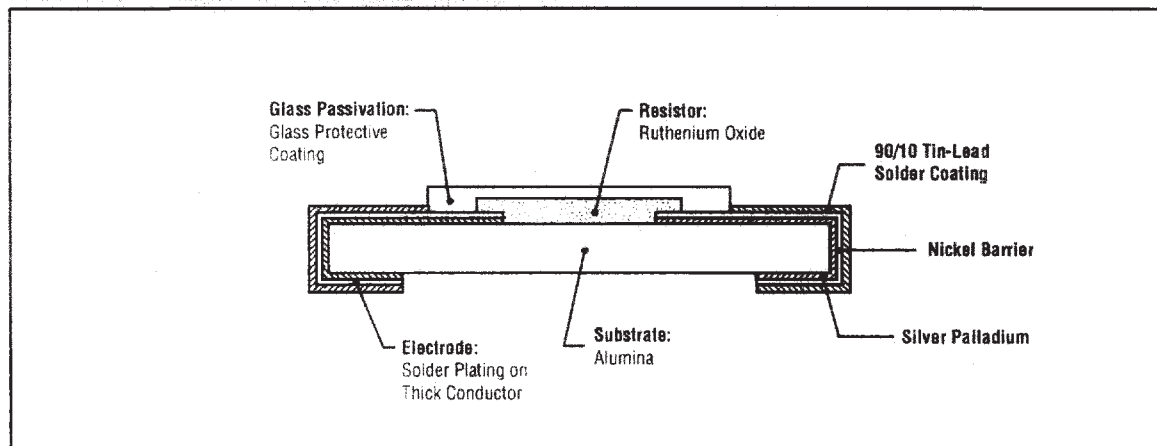
** Also applies to Jumper Chips

Under 50 milliohm tolerance on resistance is not applied.
Consult factory for tighter tolerances

Specifications subject to change without notice.

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CONSTRUCTION

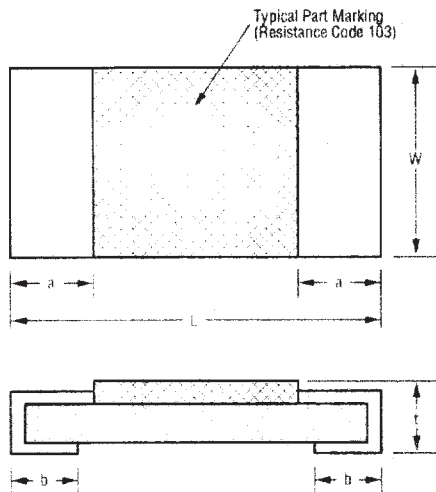


RESISTANCE CODE TABLE

Resistance (Ohm)	J (5%) Tolerance	F (1%) Tolerance
0	JP	—
1-9	All digits significant	—
10-99	Two digits significant, third digit multiplier	All digits significant
100-1Meg	Two digits significant, third digit multiplier	Three digits significant, fourth digit multiplier
Example		
2 Ohm	2R0 "R" denotes decimal place	—
20 Ohm	200	20R0 "R" denotes decimal place
20K Ohm	203	2002

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OUTLINE DIMENSIONS (Inch/mm)



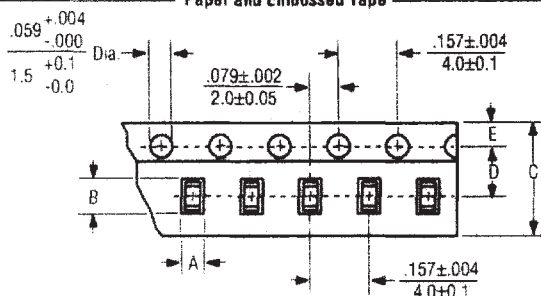
Model	L	W	t	a	b
BCR1/32	$.039 \pm .002$ $1.00 \pm .05$	$.020^{+.004}_{-.002}$ $.50^{+.10}_{-.05}$	$.014 \pm .002$ $.35 \pm .05$	$.008 \pm .004$ $.20 \pm .10$	$.01^{+.002}_{-.004}$ $.25^{+.05}_{-.10}$
BCR1/16	$.063 \pm .006$ $1.60 \pm .15$	$.031 \pm .006$ $.80 \pm .15$	$.018 \pm .004$ $.45 \pm .10$	$.012 \pm .008$ $.30 \pm .20$	$.012 \pm .008$ $.30 \pm .20$
BCR1/10	$.079 \pm .008$ $2.0 \pm .20$	$.049 \pm .004$ $1.25 \pm .10$	$.020 \pm .004$ $.50 \pm .10$	$.016 \pm .008$ $.40 \pm .20$	$.016 \pm .008$ $.40 \pm .20$
BCR1/8	$.126^{+.002}_{-.008}$ $3.20^{+.05}_{-.20}$	$.063^{+.002}_{-.006}$ $1.60^{+.05}_{-.15}$	$.024 \pm .004$ $0.60 \pm .10$	$.020 \pm .01$ $.50 \pm .25$	$.020 \pm .012$ $.50 \pm .30$
BCR1/4	$.126 \pm .008$ $3.20 \pm .20$	$.098^{+.008}_{-.004}$ $2.50^{+.20}_{-.10}$	$.024 \pm .004$ $.60 \pm .10$	$.020 \pm .008$ $.50 \pm .20$	$.020 \pm .008$ $.50 \pm .20$
BCR1/2	$.197 \pm .008$ $5.0 \pm .20$	$.098 \pm .006$ $2.5 \pm .15$	$.024 \pm .004$ $.60 \pm .10$	$.024 \pm .004$ $.60 \pm .20$	$.020 \pm .012$ $.50 \pm .30$
BCR1	$.248 \pm .008$ $6.30 \pm .20$	$.126 \pm .008$ $3.20 \pm .20$	$.023 \pm .004$ $.60 \pm .10$	$.028 \pm .008$ $.70 \pm .20$	$.028 \pm .008$ $.70 \pm .20$

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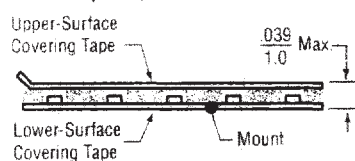
PACKAGING (Inch/mm)

(PER EIA-481 REV. A)

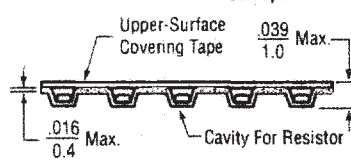
Paper and Embossed Tape



Paper Tape



Embossed Tape



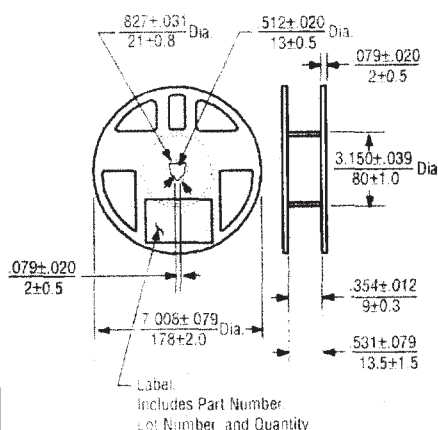
Paper Tape

Dim.	BCR1/32	BCR1/16	BCR1/10	BCR1/8
A	.026±.004 65±0.1	.043±.008 1.1±0.2	.065±.008 1.65±0.2	.079±.008 2.0±0.2
B	.045±.004 1.15±0.1	.075±.008 1.9±0.2	.094±.008 2.4±0.2	.142±.008 3.6±0.2
C		.315±.008 8.0±0.2		
D		.138±.002 3.5±0.05		
E		.069±.002 1.75±0.05		

Embossed Tape

Dim.	BCR1/4	BCR1/2	BCR1
A	.110±.008 2.8±0.2	.138±.004 3.5±0.1	
B	.138±.008 3.5±0.2	.209±.008 5.3±0.2	.266±.004 6.75±0.1
C	.315±.012 8.0±0.3	.472±.012 12.0±0.3	.472±.008 12.0±0.2
D	.138±.008 3.5±0.2	.217±.002 5.5±0.05	
E		.069±.004 1.75±0.10	

Reel



7" Reel Capacity				13" Reel Capacity			
Industry Style	Model Number	Paper Tape	Embossed Tape	Industry Style	Model Number	Paper Tape	Embossed Tape
0402	BCR1/32	10K pcs/reel	—	0402	BCR1/32	20K pcs/reel	—
0603	BCR1/16	5K pcs/reel	—	0603	BCR1/16	25K pcs/reel	—
0805	BCR1/10	5K pcs/reel	—	0805	BCR1/10	20K pcs/reel	—
1206	BCR1/8	5K pcs/reel	—	1206	BCR1/8	20K pcs/reel	—
1210	BCR1/4	—	4K pcs/reel	1210	BCR1/4	—	16K pcs/reel
2010	BCR1/2	—	4K pcs/reel	2010	BCR1/2	—	16K pcs/reel
2512	BCR1	—	4K pcs/reel	2512	BCR1	—	16K pcs/reel

OBSOLETE

ORDERING INFORMATION

