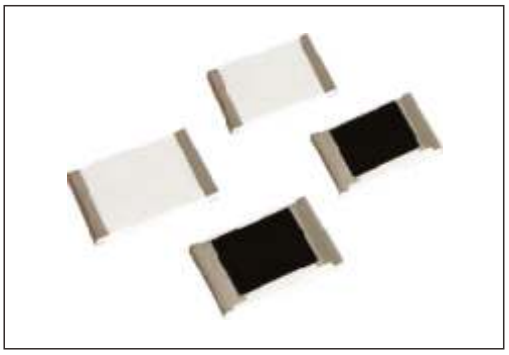
CRW Power Thick Chip Resistor



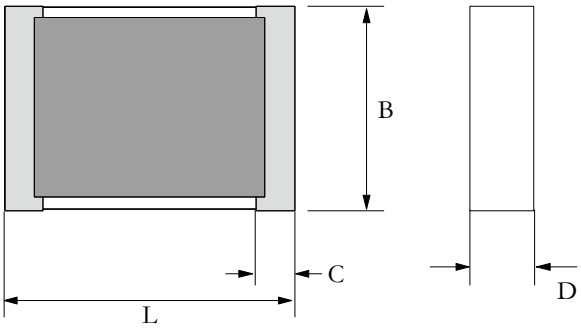
Features

Ⅰ Chip resistors in thick film
Ⅱ Contact areas Nickel-barrier/tinned
Ⅲ RF-versions with air-abrasive trimming
Ⅳ Improved pulse power rating untrimmed

Applications

Ⅰ Computers
Ⅱ Telecom and wireless
Ⅲ Meters and instruments
Ⅳ Electrical devices

Dimensions



Type	Power (W)	Dimensions(mm)			
		L	B	D	C
CRW1210	0.35	$3.2^{+0.2/-0.05}$	$2.5^{+0.2/-0.05}$	$0.5^{+0.2/-0.1}$	0.8 ± 0.2
CRW1216	0.5	$3.2^{+0.2/-0.05}$	$4.1^{+0.2/-0.05}$	$0.5^{+0.2/-0.1}$	$0.8^{+0.2}$
CRW2010	0.5	$5.1^{+0.2/-0.05}$	$2.5^{+0.2/-0.05}$	$0.6^{+0.2/-0.1}$	$1.2^{+0.2}$
CRW2040	1.5	$5.1^{+0.2/-0.05}$	$10.2^{+0.2/-0.05}$	$0.6^{+0.2/-0.1}$	$1.2^{+0.2}$
CRW2512	1.0	$6.3^{+0.2/-0.05}$	$3.5^{+0.2/-0.05}$	$0.6^{+0.2/-0.1}$	$0.9^{+0.2}$
CRW4020	1.5	$10.2^{+0.2}$	$5.1^{+0.2}$	$0.6^{+0.2/-0.1}$	$0.9^{+0.2}$

Ordering Information

Example:

CRW	1210	0.35	J	100KΩ	50ppm/℃
(1)	(2)	(3)	(4)	(5)	(6)
Series Name	Style	Power Rating	Resistance Tolerance	Resistance	T.C.R

(1)Type: CRW SERIES
(2)Style:1210,1216,2010,2040,2512,4020
(3)Power Rating: 0.35=0.35W,0.5=0.5W,1.0=1.0W,1.5=1.5W
(4)Tolerance: D=±0.5%,F=±1%,J=±5%,K=±10%,M=±20%
(5)Resistance Value:100KΩ=100KΩ
(6)T.C.R:±50ppm/℃,±100ppm/℃,±250ppm/℃
If no requirements for TCR and taping,the standard TCR(highest value in table) will be supplied and packaging is bulk.

Reference Standards

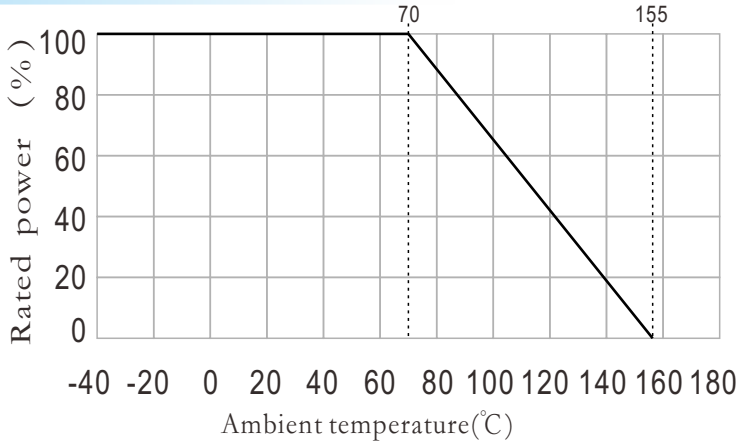
JISC 5201-1

Applications And Ratings

Type	Power (W)[1]	Working Voltage(V)		Resistance Range/Toleranses/TCR(ppm/℃)[2]			
		Trimmed	Untrimmed	0.1R~1R	1R~100R	100R~100K	100K~100M
CRW1210	0.35	200	600	TC250 5/10/20%	TC100/250 1/…/20%	TC50/250 1/…/20%	TC50/1000 1/…/20%
CRW1216	0.5	200	600	TC250 5/10/20%	TC100/250 1/…/20%	TC50/250 1/…/20%	TC50/1000 1/…/20%
CRW2010	0.5	250	900	TC250 5/10/20%	TC100/250 1/…/20%	TC50/250 1/…/20%	TC25/50/100 1/…/20%
CRW2040	1.5	250	900	TC250 5/10/20%	TC100/250 1/…/20%	TC50/250 1/…/20%	TC25/50/100 1/…/20%
CRW2512(M)	1.0	300(1000)	1200(2000)	TC250 5/10/20%	TC100/250 1/…/20%	TC50/250 0.5/…/20%	TC25/50/100 1/…/20%
CRW4020(M)	1.5	500(4000)	1500(6000)	TC250 5/10/20%	TC100/250 1/…/20%	TC50/250 0.5/…/20%	TC25/50/100 1/…/20%

1) At continuous power dissipation the dimensions of solder-pads have to secure sufficient heat-conduction.
2) TC25/50:Temperature range+25℃~+125℃ Zero-Ohm-Jumper:＜50mΩ TCR max. +4000PPM/℃,M at2512/4020:Meander structure with higher working voltange in bracket.Higher power dssipation,other sizes and specifications on request.

Derating Curve



Performance

Test Items	Test Methods(JIS C 5201-1)	
Temperature Range	-55℃~125℃	
Climatic Category	55/125/56	
Solderability	235℃, 2s	
Max. Soldering Temperature	260℃,10s	
Long Term Stability	10R~100M	<10R
Storage 125℃/1000h	<0.5%	<1%
Storage 155℃/1000h	<1%	<2%
Load P_{70}/70℃/1000h	<1%	<2%
Short term overload	<0.25%	<0.5%
Damp heat(56d/40℃/96%)	<0.5%	<1%