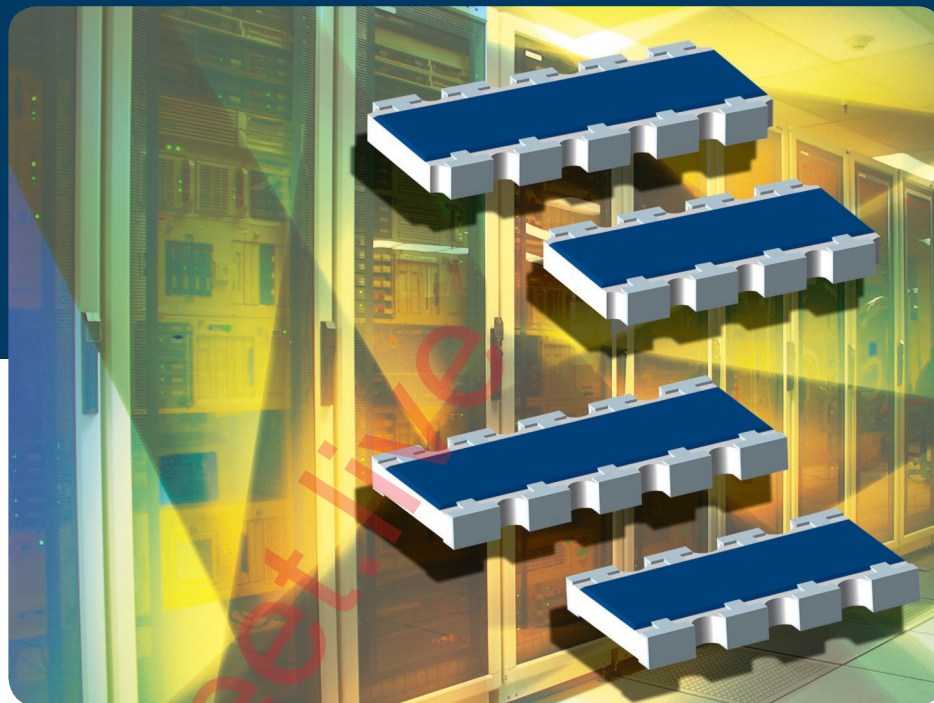




THICK FILM RESISTOR/CAPACITOR ARRAY

CRCA12E, CRCA12S



Surface-Mount Thick Film Resistor/Capacitor Array

KEY BENEFITS

- Single component reduces board space and component count
- Processing speed and space reduction superior to individual components
- Provides a circuit solution within limited real estate constraints

APPLICATIONS

- Computer boards
- High-speed processing applications

Datasheet is available on our web site at www.vishay.com
for CRCA12E, CRCA12S - <http://www.vishay.com/doc?31044>

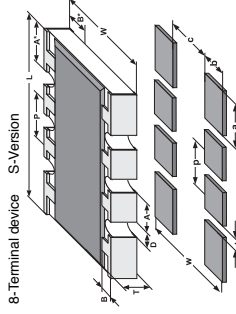
Thick Film Array, Resistor/Capacitor

FEATURES

- Single component reduces board space and component counts
- Choice of dielectric characteristics X7R or Y5U
- Wrap around termination
- Thick film R/C element
- Inner electrode protection
- Flow & Reflow solderable
- Automatic placement capability, standard size
- 8 or 10 pin configurations
- Lead (Pb)-Free version is RoHS Compliant



DIMENSIONS



GLOBAL MODEL	PIN NO#	SIZE		DIMENSIONS [in millimeters]									
		INCH	METRIC	L	W	B	T	B*	A	A*	D _{nom}	P _{nom}	
CRCA12E	8	2012	5032	5.1 ± 0.15	3.05 ± 0.15	0.61 ± 0.10	0.51 ± 0.25	0.38 ± 0.2	0.79 ± 0.15	-	0.25	1.27	
CRCA12S	8	2012	5032	5.1 ± 0.15	3.05 ± 0.15	0.61 ± 0.10	0.51 ± 0.25	0.38 ± 0.2	0.79 ± 0.15	0.89 ± 0.15	0.25	1.27	
CRCA12E	10	2512	6432	6.4 ± 0.15	3.05 ± 0.15	0.61 ± 0.10	0.51 ± 0.25	0.38 ± 0.2	0.79 ± 0.15	-	0.25	1.27	
CRCA12S	10	2512	6432	6.4 ± 0.15	3.05 ± 0.15	0.61 ± 0.10	0.51 ± 0.25	0.38 ± 0.2	0.79 ± 0.15	0.89 ± 0.15	0.25	1.27	

TECHNICAL SPECIFICATIONS		RESISTOR		CAPACITOR	
PARAMETER	UNIT	RESISTOR	X7R CAPACITOR	Y5U CAPACITOR	Y5U CAPACITOR
Rated Dissipation at 70°C (IECC-40401 IEA 575)	W	0.125	-	-	-
Capacitor Voltage Rating	V	-	50	50	50
Dielectric Withstanding Voltage (5 sec. 50mA Charge)	V _{dc}	-	125	125	125
Category Temperature Range	°C	-55 / +155	-55 / +125	-55 / +125	-30 / +85
Insulation Resistance	Ω	> 10 ¹⁰	> 10 ¹⁰	> 10 ¹⁰	> 10 ¹⁰

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: CRCA12E081472220R (preferred part numbering format)

C	R	C	A	1	2	E	0	8	1	4	7	2	2	0	R
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

MODEL	PIN COUNT	SCHEMATIC	RESISTANCE VALUE	CAPACITANCE VALUE	PACKAGING	SPECIAL
CRCA12E	08 = 8 Pin 10 = 10 Pin	1 = 01 2 = 02 3 = 03 0 = Special	2 digit significant figure followed by a multiplier 100 = 100Ω 683 = 68KΩ 105 = 1.0MΩ (Tolerance = ± 5%)	2 digit significant figure followed by a multiplier 100 = 100pF 271 = 270pF 182 = 1800pF (Tolerance = ± 20%)	E = Lead Free, TFR (2000pcs) R = Thin Lead, TFR (2000pcs) Blank = Standard	

Historical Part Number example: CRCA12E081472220MRB8 (will continue to be accepted)

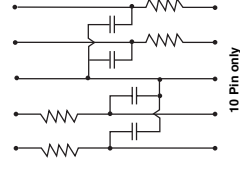
CRCA12E	08	01	472	J	220	M	RB8
MODEL	PIN COUNT	SCHEMATIC	RESISTANCE VALUE	TOLERANCE	CAPACITANCE VALUE	TOLERANCE	PACKAGING

WAVE SOLDERING		REFLOW SOLDERING									
c	w	d	p	a	b*	c	w	d	p	a	b*
2.2	4.3	0.57	1.27	0.71	1.05	2.2	3.9	0.57	1.27	0.71	0.86

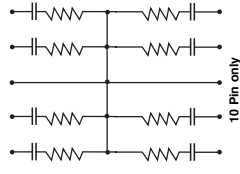
*For layouts to accept both the edge type and pull through type terminations add 0.25mm to the b-dimension and c = 1.7mm

PERFORMANCE: see CRCC1206

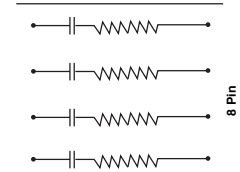
01 Circuit CRCA12E & S



02 Circuit CRCA12E & S



03 Circuit CRCA12E & S



Revision 05-Oct-05

NOTICE Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc. or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies. Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right. The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.

For technical questions, contact f2resistors@vishay.com