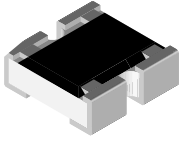


Surface Mount Chip Resistor Attenuator



FEATURES

- Single component reduces board space and component counts
- replaces 3 or more components
- Tolerance matching and temperature tracking superior to individual components
- Maximum power dissipation: 0.075 Watts for CZA06S; 0.040 Watts for CZA04S
- Consult factory for extended values, non-standard tolerances, impedance matching and other attenuation values
- Frequency range: DC to 3GHz
- Lead (Pb)-Free Version is RoHS Compliant



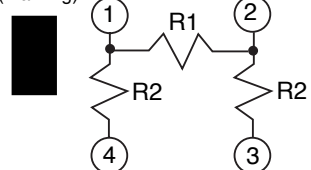
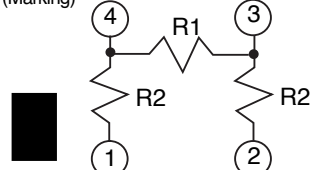
Available

RoHS*
COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	POWER RATING $P_{70^{\circ}\text{C}}$ W	IMPEDANCE Ω	ATTENUATION RANGE AND TOLERANCE	
			$\pm 0.3 \text{ dB (L)}$	$\pm 0.5 \text{ dB (H)}$
CZA04S	0.040	50	1 - 5 dB	6 - 20 dB
CZA06S	0.075	50 / 75 / 100 / 300 / 600	1 - 5 dB	6 - 20 dB

• Power rating depends on the maximum temperature at the solder point, the component placement density and the substrate material

IMPEDANCE	50 Ω	75 Ω	100 Ω	300 Ω	600 Ω	4-PIN CIRCUIT
Attenuation in dB	1	1	1	1	1	
	1.5	1.5	1.5	1.5	1.5	CZA04S: (Marking)  Unbalanced π Type
	2	2	2	2	2	
	3	3	3	3	3	
	4	4	4	4	4	
	5	5	5	5	5	
	6	6	6	6	6	
	10	10	10	10	10	
	11	11	11	11	11	
	12	12	12	12	12	
	13	13	13	13	13	
	14	14	14	14	14	CZA06S: (Marking)  Unbalanced π Type
	15	15	15	15	15	
	16	16	16	16	16	
	17	17	17	17	17	
	18	18	18	18	18	
	19	19	19	19	19	
	20	20	20	20	20	
	20	20	20	20	20	

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	CZA04S	CZA06S
Rated Dissipation at 70°C	W	0.040	0.075
VSWR		1.2 max.	1.2 max.
Category Temperature Range	°C	- 55 / + 125	- 55 / + 150
Frequency Range		DC to 3GHz	DC to 3GHz

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: CZA06S04015050LRT (preferred part numbering format)

MODEL	PIN COUNT	ATTENUATION	IMPEDANCE	TOLERANCE	PACKAGING	SPECIAL
CZA04S CZA06S	04 = 4 Pin	010 = 1.0dB 015 = 1.5dB 020 = 2.0dB 150 = 15.0dB 000 = 0 Ω Jumper	050 = 50 Ω 075 = 75 Ω 100 = 100 Ω 000 = 0 Ω Jumper	H = $\pm 0.5 \text{ dB}$ L = $\pm 0.3 \text{ dB}$ Z = 0 Ω Jumper	EA = Lead Free, T/R (All) TD = Tin/Lead, T/R (04 only) RT = Tin/Lead, T/R (06 only)	(Dash Number) (up to 1 digit) Blank = Standard

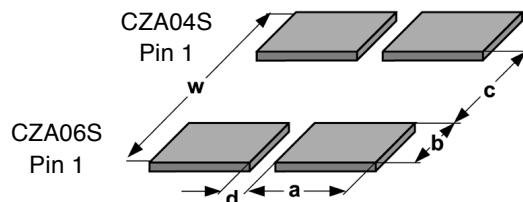
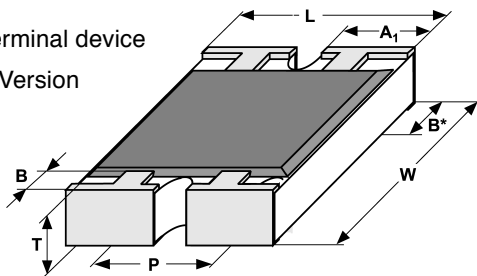
Historical Part Number example: CZA06S04015050LRT (will continue to be accepted)

CZA	06S	04	015	050	L	RT
MODEL	CASE SIZE	PIN COUNT	ATTENUATION	IMPEDANCE	TOLERANCE	PACKAGING

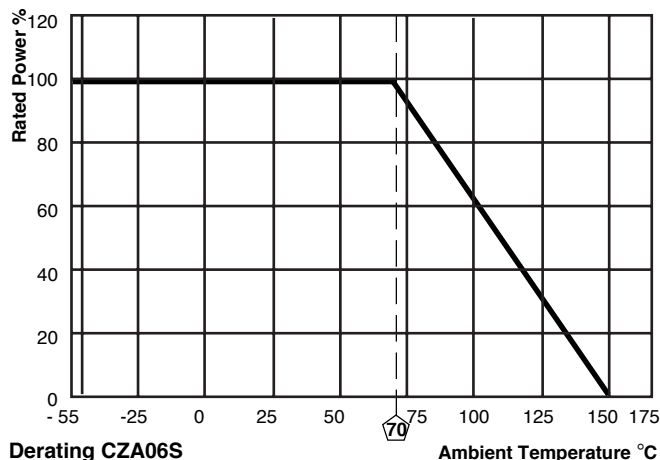
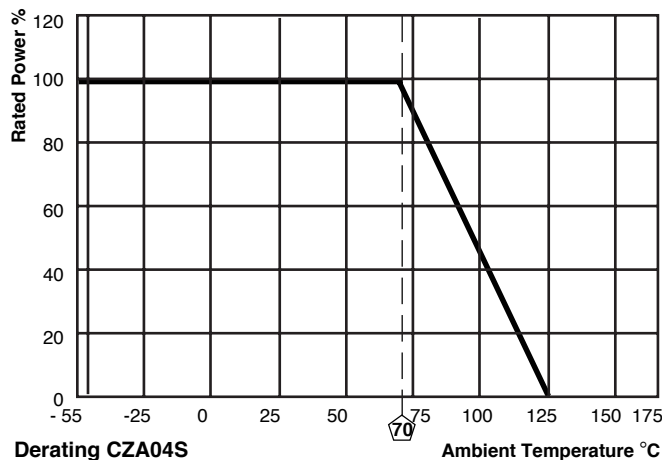
*Pb containing terminations are not RoHS compliant, exemptions may apply.

DIMENSIONS

4-Terminal device
S – Version



GLOBAL MODEL	DIMENSIONS in inches (millimeters)						
	L	W	T	A	P	B	B*
CZA04S	0.039 ± 0.004 [1.00 ± 0.10]	0.039 ± 0.006 [1.00 ± 1.15]	0.014 ± 0.004 [0.36 ± 0.10]	0.13 ± 0.006 [0.33 ± 0.15]	0.026 [0.65]	0.006 ± 0.004 [0.15 ± 0.10]	0.010 ± 0.004 [0.25 ± 0.10]
CZA06S	0.063 ± 0.006 [1.60 ± 0.15]	0.059 ± 0.006 [1.50 ± 1.15]	0.020 ± 0.004 [0.51 ± 0.10]	0.024 ± 0.006 [0.61 ± 0.15]	0.031 [0.80]	0.012 ± 0.006 [0.30 ± 0.15]	0.012 ± 0.006 [0.30 ± 0.15]
SOLDER PAD DIMENSIONS in inches (millimeters)							
	c	w	d	a	b		
CZA04S	0.018 [0.45]	0.083 [2.10]	0.083 [0.20]	0.018 [0.45]	0.032 [0.82]		
CZA06S	0.031 [0.80]	0.122 [3.10]	0.014 [0.36]	0.024 [0.63]	0.045 [1.15]		



PERFORMANCE			
TEST	CONDITIONS OF TEST	TEST RESULTS	
		0.5dB to 5dB	6dB to 20dB
Endurance Test at 70°C per EIA 575-3.14	1000 hours at 70°C, 1.5 hours "ON", 0.5 hours "OFF"	± 0.2dB	± 0.3dB
Overload per EIA 575-3.6	Short time overload	± 0.2dB	± 0.3dB
Thermal Shock	per EIA 575-3.5	± 0.2dB	± 0.3dB
Moisture Resistance	per EIA 575-3.10	± 0.2dB	± 0.3dB
Resistance to Soldering Heat	10 seconds at 260°C solder bath temperature EIA 575 3.8	± 0.2dB	± 0.3db
High Temperature Exposure	per EIA 575-3.7	± 0.2dB	± 0.3dB
Low Temperature Operations	per EIA-575-3.6	± 0.2dB	± 0.3dB
Solderability & Leaching	EIA 575-3.12	95% Coverage	



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