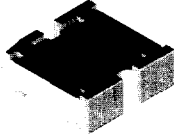




## Surface Mount Chip Attenuator



### FEATURES

- Single component reduces board space and component counts - replaces 3 or more components
- Tolerance matching and temperature tracking superior to individual components
- Maximum input power : 75 milliwatts for CZA06S; 40 milliwatts for CZA04S
- Consult factory for extended values, non-standard tolerances, impedance matching and attenuation
- Frequency range: DC to 3GHz

STANDARD ELECTRICAL SPECIFICATIONS						
MODEL	POWER RATING $P_{70^{\circ}\text{C}}$ mW	IMPEDANCE $\Omega$	ATTENUATION RANGE AND TOLERANCE			
			$\pm 0.3$ dB	$\pm 0.4$ dB	$\pm 0.8$ dB	$\pm 1.6$ dB
CZA04S	40	50 / 75 / 100 / 300	1 - 5 dB	6 - 10 dB	11 - 15 dB	16 - 20 dB
CZA06S	75	50 / 75 / 100 / 300 / 600	1 - 5 dB	6 - 10 dB	11 - 15 dB	16 - 20 dB

- Power rating depends on the maximum temperature at the solder point, the component placement density and the substrate material
- Packaging: according to EIA 481

IMPEDANCE	50 $\Omega$	75 $\Omega$	100 $\Omega$	300 $\Omega$	600 $\Omega$	<h3>4-PIN CIRCUIT</h3> <p>Unbalanced <math>\pi</math> Type</p> <p>(Marking)</p>
Attenuation	1	1	1	1	1	
in	1.5	1.5	1.5	1.5	1.5	
dB	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	
	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	

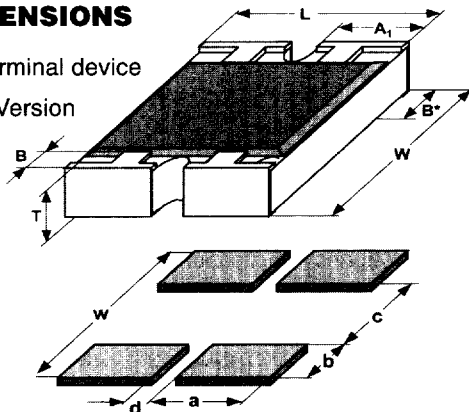
### ORDERING INFORMATION

CZA MODEL	06S CASE SIZE	04 PIN	015 ATTENUATION $\Omega$	050 IMPEDANCE	L ATTENUATION TOLERANCE	RO PACKAGING
		04 08	Three digits e.g. 010 = 1 dB 015 = 1.5 dB 020 = 2 dB 150 = 15 dB	First two digits are significant figures. Last digit is the multiplier 050 = 50 $\Omega$ 075 = 75 $\Omega$ 100 = 100 $\Omega$	L = $\pm 0.3$ dB O = $\pm 0.4$ dB H = $\pm 0.8$ dB N = $\pm 1.6$ dB	TD = 10K pieces RT = 5K pieces



**DIMENSIONS**

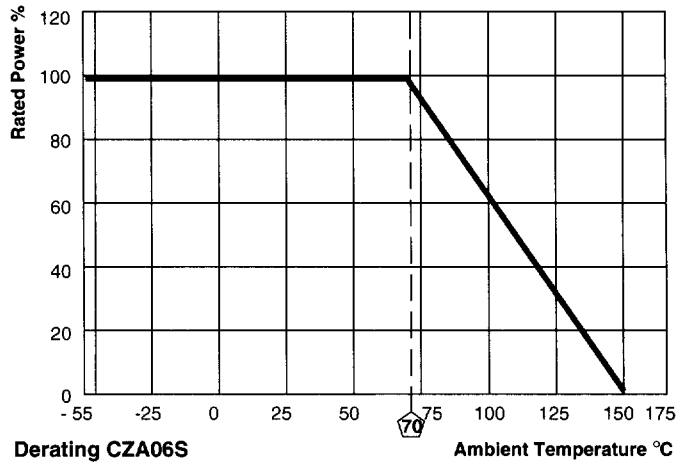
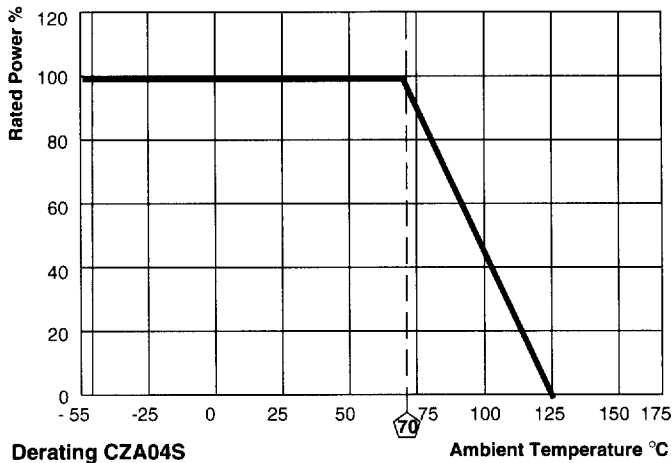
4-Terminal device  
S – Version



DIMENSION	CZA04S		CZA06S		
	INCHES	MM	INCHES	MM	
L	0.039 ± 0.004	1.0 ± 0.1	0.063 ± 0.008	1.6 ± 0.1	
W	0.039 ± 0.004	1.0 ± 0.1	0.059 ± 0.008	1.5 ± 0.15	
T	0.014 ± 0.002	0.35 ± 0.05	0.020 ± 0.004	0.5	
A	0.013 ± 0.002	0.33 ± 0.05	0.024 ± 0.008	0.61 ± 0.15	
P	0.026 nom.	0.65 nom.	0.031 ± 0.008	0.79 ± 0.15	
<b>SOLDER PAD DIMENSIONS</b> in millimeters					
	c	w	d	a	b
<b>CZA04S</b>	0.7	2.1	0.1	0.45	0.7
<b>CZA06S</b>	0.8	3.1	0.36	0.44	1.15

**TECHNICAL SPECIFICATIONS**

PARAMETER	UNIT	CZA04S	CZA06S
Rated Dissipation at 70°C	mW	40	75
RTC	ppm/ °C	± 100	± 100
VSWR		1.2 max.	1.2 max.
Category Temperature Range	°C	- 55 / + 125	- 55 / + 150
Frequency Range		DC to 3GHz	DC to 3GHz



**PERFORMANCE**

TEST	CONDITIONS OF TEST	TEST RESULTS
Endurance Test at 70°C per EIA 575-3.14	1000 hours at 70°C, 1.5 hours "ON", 0.5 hours "OFF"	± 1.0%
Overload per EIA 575-3.6	Short time overload	± 0.5%
Thermal Shock	per EIA 575-3.5	± 0.5%
Moisture Resistance	per EIA 575-3.10	± 1.0%
Resistance to Soldering Heat	10 seconds at 260°C solder bath temperature EIA 575 3.8	± 2.0%
High Temperature Exposure	per EIA 575-3.7	± 1.0%
Low Temperature Operations	per EIA-575-3.6	± 0.5%
Solderability & Leaching	EIA 575-3.12	95% Coverage