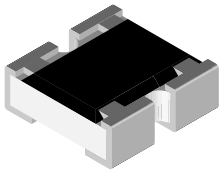
Thick Film Chip Attenuator, Surface Mount, Balanced π Type



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 W for CZB06S
- Consult factory for extended values, non-standard tolerances, impedance matching and other attenuation values
- Frequency range: DC to 3 GHz
- Surface mount chip attenuator in a resistor array package
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb Available

e3 RoHS* Available

Note

* This datasheet provides information about parts that are RoHS-compliant and / or parts that are non RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant. Please see the information / tables in this datasheet for details

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	POWER RATING $P_{70\,°C}$ W	IMPEDANCE Ω	ATTENUATION RANGE AND TOLERANCE	
			± 0.3 dB (L)	± 0.5 dB (H)
CZB06S	0.075	50/75	0 dB, 1 dB to 5 dB	6 dB to 10 dB

Note

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

IMPEDANCE	50 Ω	75 Ω
Attenuation in dB (1)	1	1
	1.5	1.5
	2	2
	3	3
	4	4
	5	5
	6	6
	10	10

Note

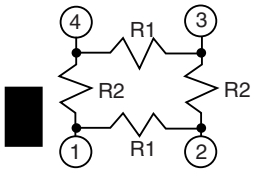
(1) Consult factory for other attenuations

CIRCUIT SCHEMATIC

4-PIN CIRCUIT

CZB06S

(Marking)



Balanced π Type

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	CZB06S
Rated dissipation at 70 °C	W	0.075
VSWR		1.2 max.
Category temperature range	°C	-55 to +150
Frequency range		DC to 3 GHz

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: CZB06S04020050LRT (preferred part numbering format)

C	Z	B	0	6	S	0	4	0	2	0	0	5	0	L	R	T	

MODEL	PIN COUNT	ATTENUATION	IMPEDANCE	TOLERANCE	PACKAGING	SPECIAL
CZB06S	**04** = 4 pin	**010** = 1.0 dB **015** = 1.5 dB **020** = 2.0 dB **100** = 10.0 dB **000** = 0 dB	**050** = 50 Ω **075** = 75 Ω	**H** = ± 0.5 dB **L** = ± 0.3 dB	**EA** = lead (Pb)-free, T/R **RT** = tin lead, T/R	(Dash number) Up to 1 digit Blank = standard

Note

- For additional information on packaging, refer to the Surface Mount Network Packaging document (www.vishay.com/doc?31540)

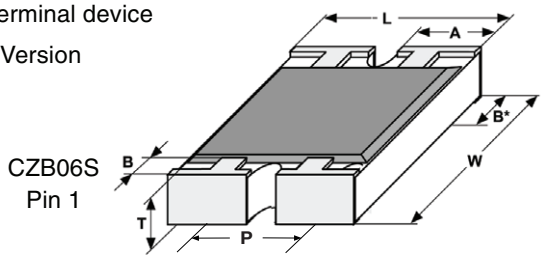
For technical questions, contact: ff2aresistors@vishay.com

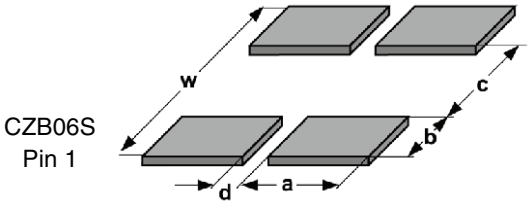
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DIMENSIONS

4-Terminal device

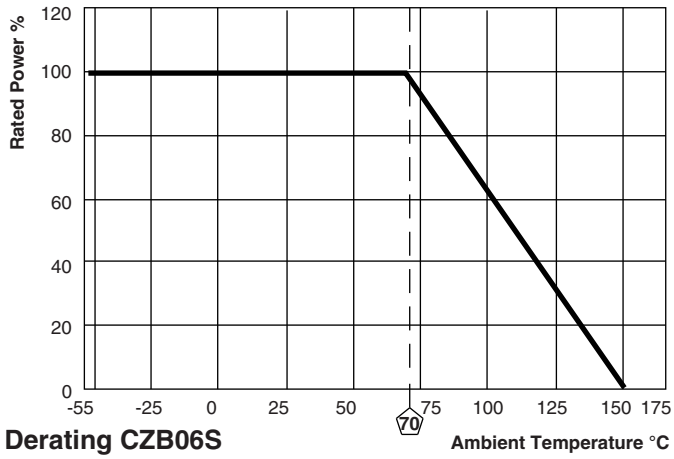
S - Version





GLOBAL MODEL	DIMENSIONS in inches (millimeters)						
	L	W	T	A	P	B	B*
CZB06S	0.063 ± 0.006 (1.60 ± 0.15)	0.059 ± 0.006 (1.50 ± 0.15)	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)

GLOBAL MODEL	SOLDER PAD DIMENSIONS in inches (millimeters)				
	c	w	d	a	b
CZB06S	0.031 (0.80)	0.122 (3.10)	0.014 (0.36)	0.025 (0.63)	0.045 (1.15)



Derating CZB06S

PERFORMANCE

TEST	CONDITIONS OF TEST	TEST RESULTS (TYPICAL TEST LOTS)	
		0.5 dB to 5 dB	6 dB to 10 dB
Endurance test at 70 °C per EIA 575-3.14	1000 h at 70 °C, 1.5 h “ON”, 0.5 h “OFF”	± 0.2 dB	± 0.3 dB
Overload per EIA 575-3.6	Short time overload	± 0.2 dB	± 0.3 dB
Thermal shock	Per EIA 575-3.5	± 0.2 dB	± 0.3 dB
Moisture resistance	Per EIA 575-3.10	± 0.2 dB	± 0.3 dB
Resistance to soldering heat	10 s at 260 °C solder bath temperature EIA 575 3.8	± 0.2 dB	± 0.3 dB
High temperature exposure	Per EIA 575-3.7	± 0.2 dB	± 0.3 dB
Low temperature operations	Per EIA-575-3.6	± 0.2 dB	± 0.3 dB
Solderability and leaching	EIA 575-3.12	95 % coverage	

For technical questions, contact: ff2aresistors@vishay.com

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