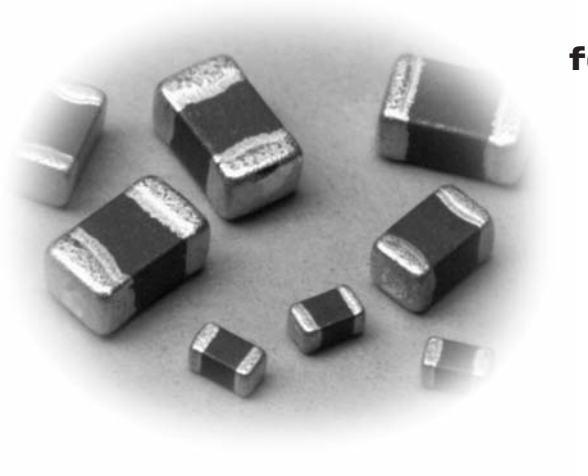
KOA SPEER ELECTRONICS, INC.

CZB

multilayer ferrite bead

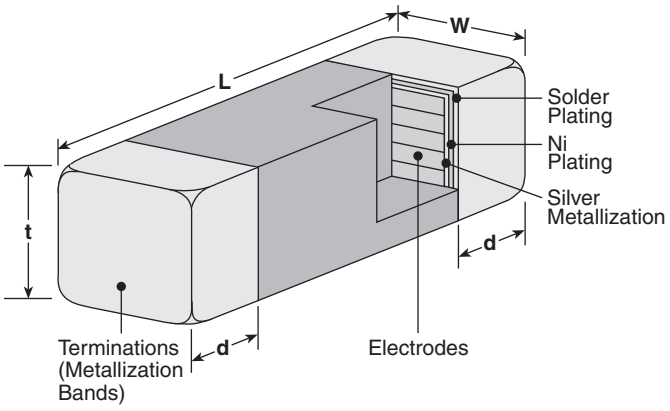
EU RoHS COMPLIANT



features

- Designed to reduce noise at high frequencies
- Standard EIA packages: 1E, 1J, 2A, 2B
- Nickel barrier with solder overcoat for excellent solderability
- Magnetically shielded
- Marking: Black body color with no marking
- Products with lead-free terminations meet EU RoHS requirements

dimensions and construction



Type (Inch Size Code)	Dimensions inches (mm) L	W	t	d
1E (0402)	.039±.004 (1.0±0.1)	.02±.004 (0.5±0.1)	.02±.004 (0.5±0.1)	.01±.004 (0.25±0.1)
1J (0603)	.063±.006 (1.6±0.15)	.031±.006 (0.8±0.15)	.031±.006 (0.8±0.15)	.014±.006 (0.36±0.15)
2A (0805)	.079±.008 (2.0±0.2)	.049±.008 (1.25±0.2)	.035±.008 (0.9±0.2)	.020±.012 (0.51±0.30)
2B (1206)	.126±.008 (3.2±0.2)	.063±.008 (1.6±0.2)	.043±.008 (1.1±0.2)	.020±.012 (0.51±0.30)

ordering information

New Part #

CZB	1E	G	T	TP	120	P
Type	Size	Permeability Code	Termination Material	Packaging	Impedance	Tolerance
	1E 1J 2A 2B	F G S	T: Sn	TP: 7" paper tape (1E only - 10,000 pieces/reel) TD: 7" paper tape (1J - 4,000 pieces/reel) (2A - <2000Ω - 4,000 pieces/reel; 2200Ω - 2,000 pieces/reel) TE: 7" embossed plastic (2B - 3,000 pieces/reel)	2 significant figures + 1 multiplier	P: ±25%

For further information on packaging, please refer to Appendix A.

EMI/EMC filtering

applications and ratings

Part Designation	Impedance @ 100MHz † (Ω)	DC Resistance Maximum †† (Ω)	Allowable DC Current Maximum (mA)	Operating Temperature Range
CZB1EGTTP100P	10	0.05	500	-55°C to +125°C
CZB1EGTTP400P	40	0.30	400	
CZB1EGTTP700P	70	0.40	200	
CZB1EGTTP800P	80		350	
CZB1EGTTP121P	120	0.50	200	
CZB1EGTTP221P	220	0.70		
CZB1EGTTP301P	300	0.80		
CZB1EGTTP451P	450	0.90	100	
CZB1EGTTP601P	600	1.00		
CZB1EGTTP102P	1000	1.50	50	
CZB1ESTTP100P	10	0.20	400	
CZB1ESTTP300P	30			
CZB1ESTTP600P	60	0.30	350	
CZB1ESTTP800P	80	0.40	300	
CZB1ESTTP101P	100			
CZB1ESTTP121P	120		200	
CZB1JGTTD190P	19	0.10	600	-55°C to +125°C
CZB1JGTTD300P	30		400	
CZB1JGTTD400P	40			
CZB1JGTTD600P	60	0.20	300	
CZB1JGTTD800P	80			
CZB1JGTTD900P	90	0.30		
CZB1JGTTD101P	100			
CZB1JGTTD121P	120			
CZB1JGTTD141P	140		250	
CZB1JGTTD151P	150		300	
CZB1JGTTD181P	180			
CZB1JGTTD221P	220			
CZB1JGTTD301P	300	0.35	250	
CZB1JGTTD421P	420	0.40	210	
CZB1JGTTD451P	450		250	
CZB1JGTTD601P	600	0.45	210	
CZB1JGTTD102P	1000	0.60	200	
CZB1JGTTD152P	1500	0.70	100	
CZB1JSTTD100P	10	0.10	600	
CZB1JSTTD300P	30	0.25	400	
CZB1JSTTD400P	40	0.20	500	
CZB1JSTTD600P	60	0.30	300	
CZB1JSTTD800P	80		400	
CZB1JSTTD101P	100			
CZB1JSTTD121P	120	0.40	300	
CZB1JSTTD221P	220	0.35		
CZB1JSTTD301P	300			
CZB1JSTTD601P	600	0.65	200	
CZB1JSTTD102P	1000	0.60		
CZB2AFTTD110P	11	0.10	800	-55°C to +125°C
CZB2AFTTD170P	17			
CZB2AFTTD300P	30			
CZB2AFTTD400P	40			
CZB2AFTTD500P	50			
CZB2AFTTD600P	60			
CZB2AFTTD800P	80	0.15	600	
CZB2AGTTD101P	100			

† Impedance test method: HP4291A
†† DCR test method: Keithley 580

For complete environmental specifications, please refer to pages 256-257.

applications and ratings (continued)

Part Designation	Impedance @ 100MHz † (Ω)	DC Resistance Maximum †† (Ω)	Allowable DC Current Maximum (mA)	Operating Temperature Range
CZB2AGTTD121P	120	0.15	600	-55°C to +125°C
CZB2AGTTD151P	150	0.25	400	
CZB2AGTTD201P	200	0.30	200	
CZB2AGTTD221P	220		300	
CZB2AGTTD301P	300			
CZB2AGTTD601P	600			
CZB2AGTTD601PV	600	0.25	500	
CZB2AGTTD102P	1000	0.40	200	
CZB2AGTTD152P	1500	0.55		
CZB2AGTTD222P	2200	0.80		
CZB2ASTTD110P	11	0.10	800	
CZB2ASTTD300P	30	0.20	500	
CZB2ASTTD600P	60			
CZB2ASTTD900P	90	0.15	600	
CZB2ASTTD121P	120	0.25	300	
CZB2ASTTD221P	220		200	
CZB2ASTTD301P	300	0.35	300	
CZB2ASTTD401P	400			
CZB2ASTTD601P	600	0.40	200	
CZB2ASTTD102P	1000	0.60		
CZB2BFTTE190P	19	0.10	800	-55°C to +125°C
CZB2BFTTE260P	26			
CZB2BFTTE300P	30			
CZB2BFTTE310P	31			
CZB2BFTTE500P	50		500	
CZB2BFTTE600P	60			
CZB2BFTTE700P	70			
CZB2BFTTE800P	80	0.20		
CZB2BFTTE900P	90			
CZB2BFTTE101P	100			
CZB2BFTTE121P	120			
CZB2BFTTE151P	150	0.15		
CZB2BFTTE201P	200	0.30	400	
CZB2BFTTE301P	300			
CZB2BFTTE401P	400	0.20	500	
CZB2BFTTE601P	600	0.40	300	
CZB2BGTTE102P	1000	0.60	200	
CZB2BGTTE152P	1500 @ 50MHz	0.70		
CZB2BSTTE190P	19	0.10	600	
CZB2BSTTE300P	30	0.15		
CZB2BSTTE600P	60			
CZB2BSTTE800P	80			
CZB2BSTTE121P	120	0.25	300	
CZB2BSTTE221P	220	0.30	400	
CZB2BSTTE401P	400			
CZB2BSTTE601P	600		250	
CZB2BSTTE102P	1000	0.55	200	

† Impedance test method: HP4291A
†† DCR test method: Keithley 580

For complete environmental specifications, please refer to pages 256-257.