

**Material names and characteristics**

B	Super High Loss
R	High Loss
S	Generic
EUC	High Frequency & Low DC Resistance
Y,A	High Frequency
Q,D	Very High Frequency
F	Ultra High Frequency



Series, Types			MMZ0402		MMZ0603		MMZ0603-H		MMZ1005		MMZ1005-H		MMZ1608			MMZ2012	
Dimensions [EIA]			0402 [01005]		0603 [0201]		0603 [0201]		1005 [0402]		1005 [0402]		1608 [0603]			2012 [0805]	
Material Name	Z @100MHz		DCR (ohm) max.	Rated current (mA)	DCR (ohm) max.	Rated current (mA)	DCR (ohm) max.	Rated current (mA)	DCR (ohm) max.	Rated current (mA)	DCR (ohm) max.	Rated current (mA)	DCR (ohm) max.	Rated current (mA)	Height (mm)	DCR (ohm) max.	Rated current (mA)
	(ohm)	Tolerance															
B	80	25%							0.19	450			0.15	600	0.6		
	120	25%							0.25	400			0.25	500	0.6		
	220	25%											0.25	500	0.6		
	300	25%											0.30	500	0.6		
	470	25%											0.40	500	0.6		
	600	25%							0.85	200			0.60	300	0.8		
	1000	25%											0.05	1500	0.8	0.05	1500
R	15	25%											0.10	800	0.8	0.10	1000
	30	25%											0.18	500	0.8	0.12	800
	60	25%											0.25	500	0.8	0.15	600
	120	25%											0.30	500	0.8		
	300	25%											0.40	500	0.8	0.20	500
	470	25%											0.50	400	0.8	0.30	500
	600	25%															
S	10	5Ω	0.07	750	0.05	1000							0.10	600	0.8	0.10	1000
	40	25%															
	70	25%	0.36	300													
	80	25%			0.30	200	0.18	520	0.12	500	0.10	800	0.15	500	0.8	0.10	800
	120	25%	0.70	210	0.45	200	0.22	480	0.22	500	0.13	700	0.15	500	0.8	0.15	800
	150	25%	0.70	200													
	180	25%											0.20	500	0.8	0.15	600
	220	25%											0.20	500	0.8		
	240	25%	1.00	200	0.57	200	0.32	420	0.28	400	0.18	600	0.30	500	0.8	0.20	600
	300	25%											0.30	500	0.8		
EUC	150	25%	0.62	350									0.90	200	0.8		
	180	25%	0.69	300													
	15	25%											0.05	1500	0.8	0.05	1500
	30	25%											0.10	550			
	40	25%											0.15	500	0.8	0.10	1000
	60	25%															
	75	25%	0.70	250	0.35	300											
	80	25%							0.17	450							
	120	25%			0.39	200			0.18	400			0.20	500	0.8	0.12	800
	150	25%	0.69	200									0.30	500	0.8		
Y	220	25%															
	240	25%			0.80	200			0.26	300			0.30	500	0.8	0.15	600
	300	25%							0.38	250			0.35	500	0.8		
	470	25%			1.40	200			0.47	250			0.40	500	0.8	0.20	500
	600	25%			1.50	200			0.54	250			0.45	500	0.8		
	750	25%											0.50	400	0.8	0.30	500
	1000	25%							0.70	200			0.60	300	0.8	0.40	500
	1500	25%							1.00	100							
	1800	25%							0.85	150							
	2000	25%														0.50	400
A	1800	25%											0.80	200	0.8		
	2200	25%											0.80	200	0.8		
	2500	25%											0.80	200	0.8		
													0.30	500	0.8		
Q	120	25%											0.40	500	0.8		
	220	25%											0.50	400	0.8		
	330	25%											0.70	300	0.8		
	470	25%											0.80	200	0.8		
	600	25%											1.00	200	0.8		
D	5	2Ω											0.05	700	0.8		
	10	5Ω							0.10	500			0.10	500	0.6		
	22	25%	0.70	250					0.17	400			0.20	500	0.6		
	33	25%			0.70	200			0.24	400							
	47	25%			0.70	200											
	50	25%											0.25	500	0.6		
	56	25%			0.95	100											
	68	25%							0.38	400							
	80	25%			1.25	100							0.30	500	0.6	0.30	500
	80	25%											0.30	500	0.8		
	120	25%			1.40	100			0.60	350			0.30	400	0.6	0.30	500
	120	25%											0.30	400	0.8		
240	25%							0.90	200			0.60	300	0.8			
300	25%											0.70	300	0.8	0.50	400	
F	3	Typ.											0.05	700	0.8		
	10	5Ω			0.50	200											
	22	25%			1.00	200											
	33	25%			1.30	150											
	47	25%							0.50	200							
	56	25%							0.60	100			0.40	500	0.8		
	75	25%							0.70	100							
120	25%											0.55	300	0.8			
												0.75	200	0.8			

Material names and characteristics

S	Generic
A	High Frequency
D	Very High Frequency
F	Ultra High Frequency
AFZ, AFY	High Frequency (Low εType)

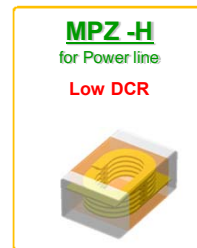
**MMZ-E**  
for Signal line  
High impedance  
in Wide Band

**MMZ-V**  
for Signal line  
High impedance  
in High GHz Band

Series, Types		MMZ0603-E					MMZ1005-E				
Dimensions [EIA]		0603 [0201]					1005 [0402]				
Material Name	Z @100MHz		Z @1GHz		DCR (ohm) max.	Rated current (mA)	Z @1GHz		DCR (ohm) max.	Rated current (mA)	
	(ohm)	Tolerance	(ohm)	Tolerance			(ohm)	Tolerance			
S	120	25%	200	40%	0.37	250					
	240	25%	400	40%	0.71	200					
	600	25%	1000	40%	1.60	150	1000	40%	0.65	300	
	1000	25%	1800	40%	2.60	125	1400	40%	1.00	250	
	1800	25%					1800	40%	1.50	200	
A	120	25%	300	40%	0.44	250					
	240	25%	600	40%	0.86	200					
	330	25%	750	40%	1.00	220					
	470	25%	1000	40%	1.30	185					
	600	25%	1500	40%	1.70	160	1400	40%	0.80	300	
	1000	25%	2300	40%	2.90	130	2000	40%	1.20	250	
	1500	25%					2300	40%	1.60	230	
1800	25%					2700	40%	2.10	200		
2200	25%					3000	40%	2.20	150		
D	33	25%	200	40%	0.60	250					
	47	25%	300	40%	0.76	200					
	120	25%	1000	40%	2.40	125	1000	40%	0.70	300	
	120	25%									
	160	25%	1400	40%	2.90	125					
220	25%					1700	40%	1.00	250		
F	47	25%					800	40%	0.70	300	
	56	25%	700	40%	1.90	150					
	75	25%	950	40%	2.60	125	1500	40%	1.00	250	
	120	25%					2300	40%	1.50	200	
	180	25%					3200	40%	1.60	200	
	220	25%					5000	40%	2.30	150	
AFY	56	25%	500	40%	2.20	125					
AFZ	75	25%					500	0.40	0.90	250	
	150	25%					1000	0.40	1.30	200	
	180	25%					1200	0.40	1.60	150	

**Material names and characteristics**

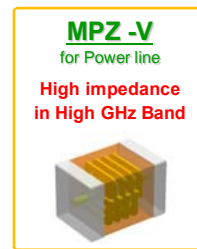
B	Super High Loss
R	High Loss
S	Generic
Y	High Frequency
D	Very High Frequency



Series, Types			MPZ0402		MPZ0603		MPZ0603-H		MPZ1005		MPZ1005-H		MPZ1608			MPZ2012	
Dimensions [EIA]			0402 [01005]		0603 [0201]		0603 [0201]		1005 [0402]		1005 [0402]		1608 [0603]			2012 [0805]	
Material Name	Z @100MHz		DCR (ohm) max.	Rated current (A)	DCR (ohm) max.	Rated current (A)	DCR (ohm) max.	Rated current (A)	DCR (ohm) max.	Rated current (A)	DCR (ohm) max.	Rated current (A)	DCR (ohm) max.	Rated current (A)	Height (mm)	DCR (ohm) max.	Rated current (A)
	(ohm)	Tolerance															
B	470	25%											0.150	1.00	0.8		
R	390	25%											0.120	1.20	0.8		
S	10	5Ω	0.050	1.10					0.025	3.00							
	22	25%	0.150	0.75	0.065	1.00	0.036	1.90					0.007	6.00	0.6		
	26	25%											0.010	5.00	0.6	0.010	6.00
	30	10Ω							0.035	1.70							
	33	25%	0.200	0.55	0.090	0.75	0.050	1.60			0.022	3.00					
	47	25%			0.120	0.50											
	60	25%							0.060	1.50				0.020	3.50	0.6	
	80	25%					0.095	1.20									
	90	25%									0.038	2.30					
	100	25%											0.030	3.00	0.6	0.020	4.00
	120	25%					0.130	1.00	0.090	1.20	0.055	2.00	0.045	2.00	0.6		
	180	25%									0.085	1.60	0.050	2.00	0.6		
	220	25%									0.095	1.50	0.050	2.20	0.8	0.040	3.00
330	25%											0.080	1.70	0.8	0.050	2.50	
470	25%											0.150	1.00	0.8			
600	25%											0.150	1.00	0.8	0.100	2.00	
1000	25%											0.300	0.80	0.8	0.150	1.50	
Y	60	25%											0.030	2.30	0.8		
	90	25%						0.100	1.20								
	100	25%										0.040	2.00	0.8			
	150	25%										0.050	1.80	0.8			
D	220	25%										0.100	1.50	0.8			
	30	10Ω										0.060	1.80	0.8			
	60	25%										0.100	1.20	0.8			
	100	25%										0.150	1.00	0.8			

**Material names and characteristics**

S	Generic
A	High Frequency
D	Very High Frequency
F	Ultra High Frequency
AFZ	High Frequency (Low εType)



Series, Types			MPZ1005-E				MPZ1005-V				MPZ1005-N			
Dimensions [EIA]			1005 [0402]				1005 [0402]				1005 [0402]			
Material Name	Z @100MHz		Z @1GHz		DCR (ohm) max.	Rated current (A)	Z @1GHz		DCR (ohm) max.	Rated current (A)	Z @1GHz		DCR (ohm) max.	Rated current (A)
	(ohm)	Tolerance	(ohm)	tolerance			(ohm)	tolerance			(ohm)	tolerance		
S	120	25%	200	40%	0.095	1.50								
	220	25%	350	40%	0.220	0.90								
	330	25%	550	40%	0.280	0.70								
A	150	25%	350	40%	0.180	0.80								
	330	25%	800	40%	0.300	0.60								
D	33	25%	200	40%	0.180	0.80								
	75	25%	500	40%	0.300	0.60								
F	33	25%	400	40%	0.350	0.55								
	47	25%	600	40%	0.450	0.45								
AFZ	10	40%									60(typ.)	-	0.150	1.20
	15	40%					80	40%	0.300	0.80				
	30	25%					170	40%	0.450	0.60				