

## Zero Ohm Jumper (0.003 $\Omega$ Max.), Metal Foil, Surface-Mount Device



### FEATURES

- Ideal for all applications including switching power supplies, voltage regulation modules, DC/DC converters and power management applications
- AEC-Q200 qualified
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**

### STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	SIZE	CURRENT RATING A	WEIGHT (typical) g/1000 pieces	RESISTANCE VALUE MAX. $\Omega$
WFZ0402	0402	6.5	0.86	0.003
WFZ0603	0603	25	3.28	0.0005
WFZ0805	0805	31	7.86	0.0005
WFZ1206	1206	38	14.44	0.0005
WFZ2512	2512	63	57.89	0.0005

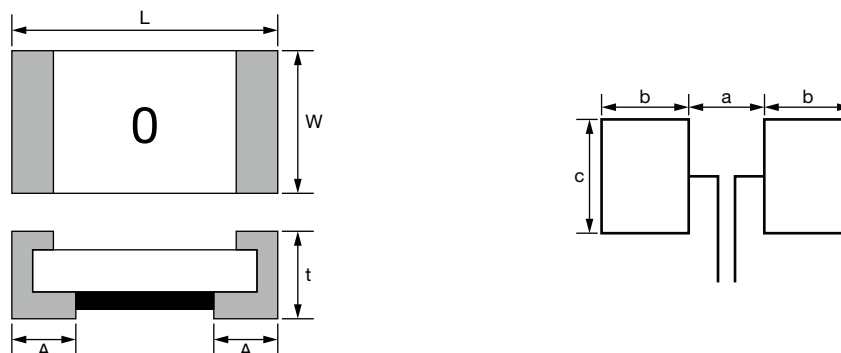
### GLOBAL PART NUMBER INFORMATION

Global Part Numbering Example: WFZ08050000ZE66

W	F	Z	0	8	0	5	0	0	0	0	0	Z	E	6	6
GLOBAL MODEL (3 digits) <b>WFZ</b>			CASE SIZE (EIA) (4 digits) <b>0805</b>			RESISTANCE VALUE (5 digits) <b>00000 = jumper</b>					TOLERANCE CODE (1 digit) <b>Z = jumper</b>		PACKAGING CODE (3 digits) <b>E66 = lead (Pb)-free, tape/reel</b>		

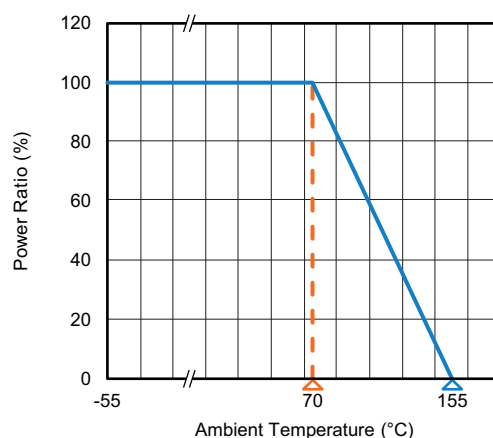
### TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Operating temperature range	$^{\circ}\text{C}$	-55 to +155

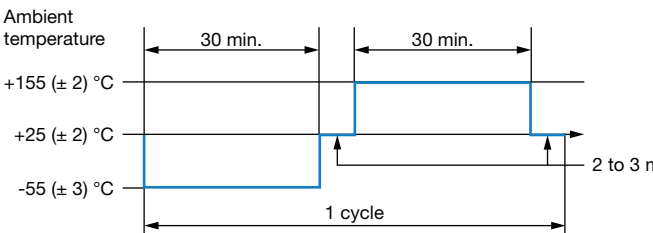
**DIMENSIONS** in millimeters

**Note**

- Surface mount solder profile recommendations: [www.vishay.com/doc?31052](http://www.vishay.com/doc?31052)

TYPE (INCH SIZE)	DIMENSIONS (in millimeters)				SOLDER PAD DIMENSIONS (in millimeters)		
	L	W	t	A	a	b	c
WFZ0402	1.00 ± 0.10	0.50 ± 0.10	0.40 ± 0.10	0.30 ± 0.10	0.40	0.50	0.60
WFZ0603	1.55 ± 0.10	0.80 ± 0.10	0.55 ± 0.10	0.35 ± 0.20	0.90	0.70	1.00
WFZ0805	2.00 ± 0.15	1.25 ± 0.15	0.65 ± 0.10	0.35 ± 0.20	1.20	1.20	1.40
WFZ1206	3.10 ± 0.20	1.55 ± 0.15	0.70 ± 0.10	0.80 ± 0.20	2.00	1.30	1.80
WFZ2512	6.35 ± 0.20	3.10 ± 0.20	0.65 ± 0.10	0.80 ± 0.25	3.80	2.10	3.40

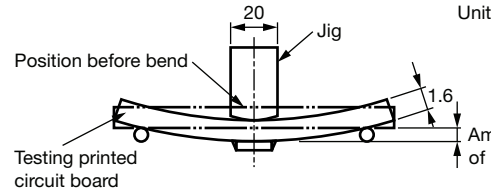
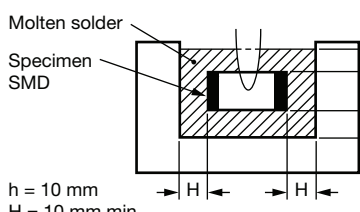
**DERATING**


## PERFORMANCES

ENVIRONMENTAL PERFORMANCE			
NO.	ITEM	TEST CONDITION	SPECIFICATION
1	Short time overload	2.5 x rated current for 5 seconds (JIS-C5202-5.5)	0402: max. 3 mΩ 0603 to 2512: max. 0.5 mΩ
3	Biased humidity	The specimens shall be placed in a chamber and subjected to a relative humidity of 90 % to 95 % and a temperature of 40 °C ± 2 °C for the period of 1000 hours. (MIL-STD-202, method 103)	0402: max. 3 mΩ 0603 to 2512: max. 0.5 mΩ
4	High temperature exposure	The chip (mounted on board) is exposed in the heat chamber 125 °C ± 3 °C for 1000 hours. (JIS-C5202-7.2)	0402: max. 3 mΩ 0603 to 2512: max. 0.5 mΩ
5	Load life	Apply rated power at 90 °C ± 2 °C for 1000 hours with 1.5 hours ON and 0.5 hour OFF. (JIS-C5202-7.10)	0402: max. 3 mΩ 0603 to 2512: max. 0.5 mΩ
6	Rapid change of temperature	<p>The chip (mounted on board) is exposed, -55 °C ± 3 °C (30 min.) / +155 °C ± 2 °C (30 min.) for 5 cycles. The following conditions as the following figure. (JIS-C5202-7.4)</p> 	0402: max. 3 mΩ 0603 to 2512: max. 0.5 mΩ

### Note

- Test board surface temperature shall not exceed 100 °C when applying rated current

FUNCTION PERFORMANCE			
NO.	ITEM	TEST CONDITION	SPECIFICATION
1	Bending strength	<p>Mount the chip to test substrate. Apply pressure in direction of arrow unit band width reaches 2 mm (+0.2 mm / -0 mm) illustrated in the figure below and hold for 10 s ± 1 s. (JIS-C5202-6.1)</p> 	0402: max. 3 mΩ 0603 to 2512: max. 0.5 mΩ
2	Resistance to solder heat	The specimen chip shall be immersed into the flux specified in the solder bath 260 °C ± 5 °C for 10 s ± 1 s. (MIL-STD-202, method 210)	0402: max. 3 mΩ 0603 to 2512: max. 0.5 mΩ
3	Solderability	<p>The specimen chip shall be immersed into the flux specified in the solder bath 235 °C ± 5 °C for 2 s ± 0.5 s. It shall be immersed to a point 10 mm from its root. (Sn96.5 / Ag3.0 / Cu0.5) (JIS-C5 202-6.11)</p> 	0402: max. 3 mΩ 0603 to 2512: max. 0.5 mΩ

# TAPE SPECIFICATION

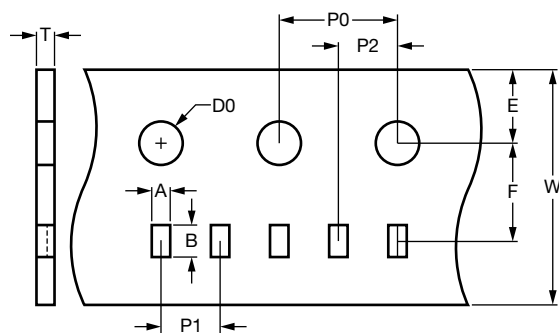


Fig. 1

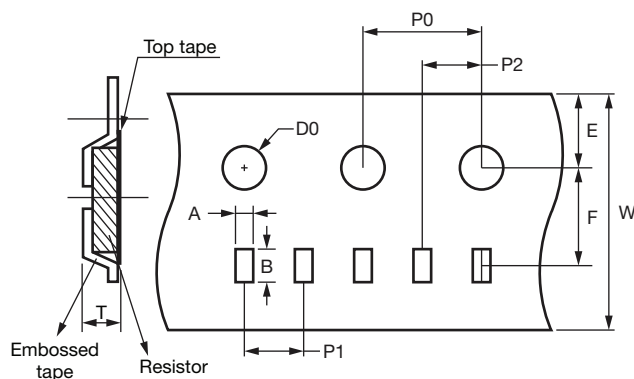


Fig. 2

TYPE	CARRIER DIMENSIONS in millimeters										FIG.
	A	B	E	F	W	P0	P1	P2	D0	T	
WFZ0402	0.7 ± 0.05	1.2 ± 0.05	1.75 ± 0.1	3.5 ± 0.05	8.0 ± 0.2	4.0 ± 0.1	2.0 ± 0.1	2.0 ± 0.05	1.55 ± 0.05	0.45 ± 0.1	1
WFZ0603	1.1 ± 0.1	1.9 ± 0.1	1.75 ± 0.1	3.5 ± 0.05	8.0 ± 0.2	4.0 ± 0.1	4.0 ± 0.1	2.0 ± 0.05	1.55 ± 0.05	0.60 ± 0.1	1
WFZ0805	1.6 ± 0.1	2.4 ± 0.1	1.75 ± 0.1	3.5 ± 0.05	8.0 ± 0.2	4.0 ± 0.1	4.0 ± 0.1	2.0 ± 0.05	1.55 ± 0.05	0.97 ± 0.1	1
WFZ1206	2.0 ± 0.1	3.6 ± 0.1	1.75 ± 0.1	3.5 ± 0.05	8.0 ± 0.2	4.0 ± 0.1	4.0 ± 0.1	2.0 ± 0.05	1.55 ± 0.05	0.97 ± 0.1	1
WFZ2512	3.5 ± 0.1	6.8 ± 0.1	1.75 ± 0.1	5.5 ± 0.05	12.0 ± 0.2	4.0 ± 0.05	4.0 ± 0.1	2.0 ± 0.05	1.5 ± 0.1	1.0 ± 0.2	2

PACKAGING			
MODEL	TAPE WIDTH	DIAMETER	PIECES / REEL
WFZ0402	Embossed paper tape	178 mm / 7"	10 000
WFZ0603 WFZ0508 WFZ1206	Embossed paper tape	178 mm / 7"	5000
WFZ2512	Embossed plastic tape	178 mm / 7"	4000



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