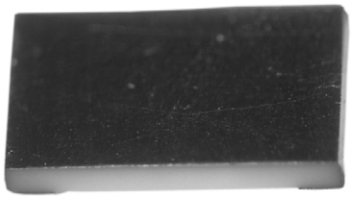
0 Ω SMD Thin Film Chip Resistor (Strap)



FEATURES

- SMD wraparound strap (0 Ω)
- Sizes available: 02016 to 2512
- Thin film technology
- Terminations: tin / silver or tin / lead
- Resistance value < 30 mΩ
- Maximum current through resistor: 0.5 A to 6.3 A
- Screening sequence under 0057 option
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free Available
RoHS* Available
HALOGEN FREE Available
GREEN (5-2008) 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

LINKS TO ADDITIONAL RESOURCES

3D Models S-Parameters

More and more, customers use SMD straps (0 Ω) to able or disable a function on their PCB. Vishay Sfernice offers straps in a wide range of standard dimensions: from 02016 to 2512.

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	SIZE	RESISTANCE RANGE Ω	RATED POWER W	MAXIMUM CURRENT A
PZR02016	02016	0.02	0.02	0.5
PZR0402	0402	0.02	0.04	1.4
PZR0603	0603	0.02	0.08	2
PZR0805	0805	0.02	0.15	2.7
PZR1206	1206	0.025	0.25	3.2
PZR2010	2010	0.025	0.8	5.7
PZR2512	2512	0.025	1	6.3

CLIMATIC SPECIFICATIONS

Operating temperature range	-55 °C; +155 °C
Storage temperature range	

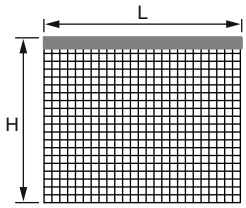
MECHANICAL SPECIFICATIONS

Substrate	Alumina
Technology	Thin film
Film	SnPb or SnAg over nickel barrier over Au
Terminations	**B type:** SnPb for solder reflow over nickel barrier **C type:** SnPb one face **N type:** SnAg for solder reflow over nickel barrier **F type:** SnAg one face

DIMENSIONS in millimeters

One Face Termination
PZR02016 to PZR2512

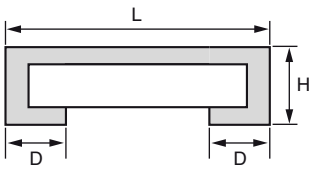
Side View



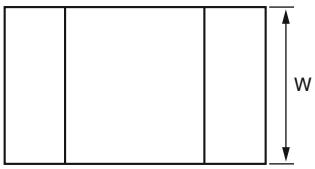
Active Face View

Wraparound Terminations
PZR0402 to PZR2512

Side View



Bottom View



TERMINATIONS	One face	Wraparound	One face	Wraparound	One face	Wraparound	One face	Wraparound
MODEL	L		W		H		D	
PZR02016	0.48 (± 0.1)	n/a	0.39 (± 0.1)	n/a	0.42 ± 0.07		n/a	
PZR0402	1 ± 0.152		0.6 ± 0.127		0.5 ± 0.127		n/a	0.25 ± 0.1
PZR0603	1.52 ± 0.152		0.85 ± 0.127		0.5 ± 0.127		n/a	0.38 ± 0.13
PZR0805	1.91 ± 0.152		1.27 ± 0.127		0.5 ± 0.127		n/a	0.38 ± 0.13
PZR1206	3.06 ± 0.152		1.6 ± 0.127		0.5 ± 0.127		n/a	0.40 ± 0.13
PZR2010	5.08 ± 0.152		2.54 ± 0.127		0.5 ± 0.127		n/a	0.48 ± 0.13
PZR2512	6.35 ± 0.152		3.3 ± 0.127		0.5 ± 0.127		n/a	0.48 ± 0.13

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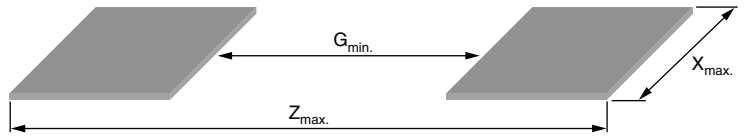
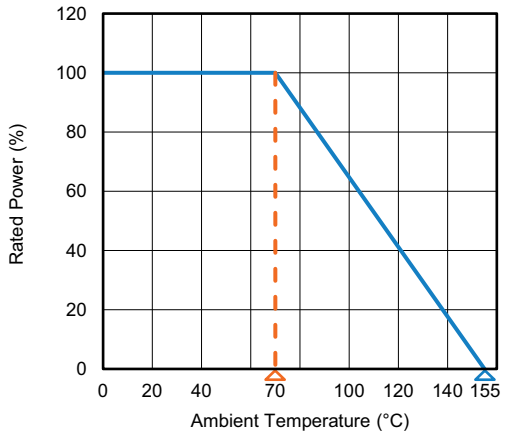
SUGGESTED LAND PATTERN in millimeters



TERMINATIONS	One face	Wraparound	One face	Wraparound	One face	Wraparound
MODEL	**$Z_{max.}$**		**$G_{min.}$**		**$X_{max.}$**	
PZR02016	0.55	n/a	0.15	n/a	0.50	n/a
PZR0402	1.15	1.55	0.15		0.73	
PZR0603	1.67	2.37	0.35		0.98	
PZR0805	2.06	2.76	0.74		1.40	
PZR1206	3.21	3.91	1.85		1.73	
PZR2010	5.23	5.93	3.71		2.67	
PZR2512	6.5	7.20	4.91		3.32	

POWER DERATING CURVE



PACKAGING

Antistatic packaging: Waffle pack or paper tape or low conductivity plastic tape.

PZR02016 only available in plastic tape.

SIZE	MOQ	NUMBER OF PIECES PER PACKAGE			TAPE WIDTH
		WAFFLE PACK 2" × 2"	TAPE AND REEL		
			MIN.	MAX.	
02016	100	n/a	100	5000	8 mm
0402		340			
0603		100			
0805 0705				4000	
1206		140			
2010		60		1000	
2512		50		2000	12 mm

PACKAGING RULES

Waffle Pack

Can be filled up to maximum quantity indicated in the table here above, taking into account the minimum order quantity. When quantity ordered exceeds maximum quantity of a single waffle pack, the waffle packs are stacked up on the top of each other and closed by one single cover. **To get "not stacked up" waffle pack in case of ordered quantity > maximum number of pieces per package: Please consult Vishay Sfernice for specific ordering code**.

Tape and Reel

Can be filled up to maximum quantity indicated in the table here above, taking into account the minimum order quantity. When quantity ordered is between the MOQ and the maximum reel capacity, only one reel is provided. **When several reels are needed for ordered quantity within MOQ and maximum reel capacity: Please consult Vishay Sfernice for specific ordering code**.

Parts are packed: active face down.

OPTIONS

0057 option [1]:

Screening sequence:

- 100 % rapid change of temperature
- 100 %electrical control
- 100 % visual inspection

Note

[1] Termination B tin / lead wraparound available only

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GLOBAL PART NUMBER INFORMATION

Global Part Numbering: PZR02016-0R00FT

P	Z	R	0	2	0	1	6	-	0	R	0	0	F	T	0	9	9

GLOBAL MODEL	SIZE	OHMIC VALUE	TERMINATION [1]	PACKAGING	OPTION
PZR	**02016** **0402** **0603** **0805** **1206** **2010** **2512**	**0 Ω**	**C** = tin / lead (one face) **F** = tin / silver (one face) **N** = tin / silver (wraparound) **B** = tin / lead (wraparound)	For more information see Codification of Packaging table	From 1 to 3 digits, leave blank if no option

Notes

[1] PZR02016: one face termination only

CODIFICATION OF PACKAGING

CODE 18	PACKAGING
WAFFLE PACK (Not available for 02016)	
W	100 min., 1 mult.
WA	100 min., 100 mult. (available only in size 1206)
PLASTIC TAPE (standard for all sizes)	
T	100 min., 1 mult.
TA	100 min., 100 mult.
TB	250 min., 250 mult.
TC	500 min., 500 mult.
TD	1000 min., 1000 mult.
TE	2500 min., 2500 mult.
TF	Full tape (quantity depending on size of chips)
PAPER TAPE (Available for 0402, 0603, 0805 and 1206. Please consult Vishay Sfernice for other sizes.)	
PT	100 min., 1 mult.
PA	100 min., 100 mult.
PB	250 min., 250 mult.
PC	500 min., 500 mult.
PD (not available for size 0402)	1000 min., 1000 mult.
PE (not available for size 0402)	2500 min., 2500 mult.
PF (not available for size 0402)	Full tape (quantity depending on size of chips)

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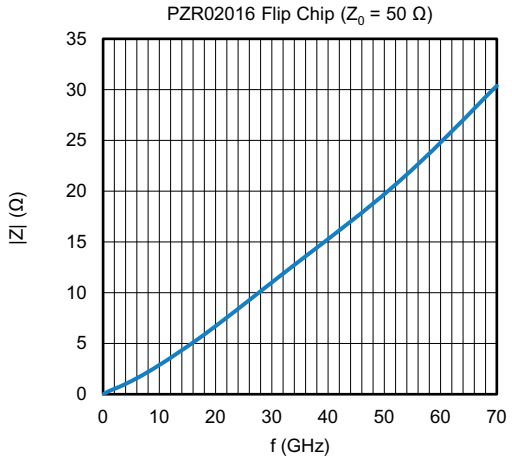
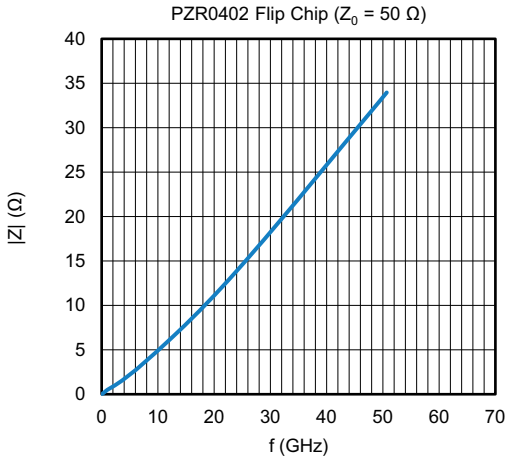
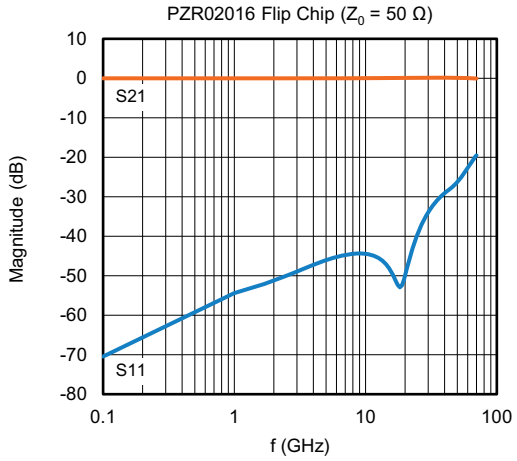
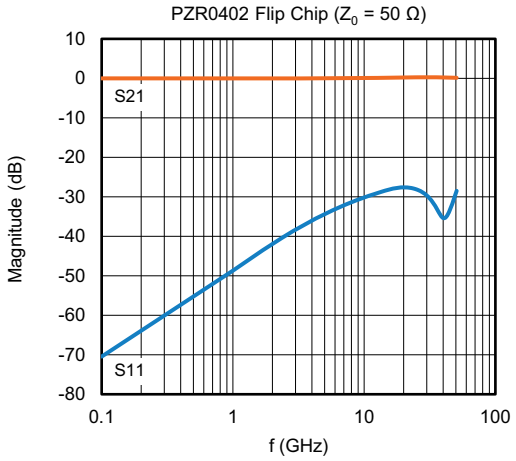
INTERNAL IMPEDANCE CURVES





S-PARAMETER





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