

024
026
202

POWER
IMS

204
206
208
210



Features

Thick film technology

Single Side Terminations
for Wirebonding, Solder
Reflow, and Epoxy
Attachment

Platinum Silver, Platinum
Silver with Solder Coating,
Gold Terminations

Resistance values from
0.05Ω to 20 MΩ

Tolerances to ± 1 %

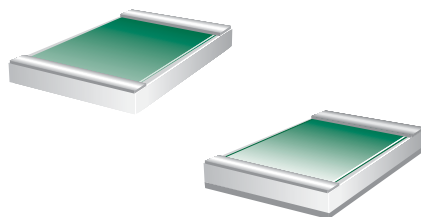
Optional Backplane

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High Power Thick Film Chip Resistors

The **ims** IMS Power line of thick film single side high power chip resistors is the line to choose when stable performance at elevated power levels is required. Robust thick film on alumina construction ensures reliability and durability. Many combinations of termination materials are available to meet the requirements of all common attachment methods. Sizes from .120" X .240" to 0.620" X 0.270" are offered. A wide range of values and tolerances is available.

Terminations



Termination materials:

- 1 Au
- 3 PtAg
- C PtAg with 62/36/2 solder coating
- P PtAg with 96/4 tin silver solder coating

Full backplane available as an option.

Resistance Ranges

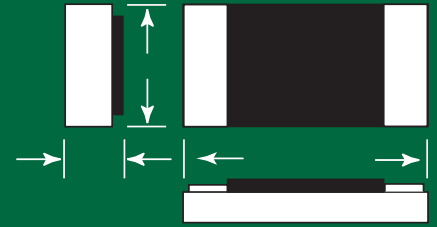
Resistances from 0.05 ohm to 20 Meg ohms are available in any increment. Not all values available in all devices and/or all termination metalizations. Note: IMS026 available in 0.05Ω to 1Ω resistance range only.

A Word About Thermal Management

Care must be taken when using chip resistors capable of dissipating large amounts of power. IMS' power chips can dissipate large amounts of power for their size. Because of this, thermal management is **critical**. The power ratings listed for the chip resistors on this data sheet are measured in free air - no heat sinking was used. Each chip handled the rated power and still performed within its stated electrical parameters. HOWEVER, in free air at these power ratings, the resistors can become very hot - in most cases exceeding the melting point of 60/40 solder. Therefore, heat sinking is essential. Depending upon the efficiency of the heat sink, rated power may even be surpassed on these resistors.

Dimensions

Part Number	Length	Width	Height
IMS024	0.240 ^{+0.008} _{-0.002}	0.120 ^{+0.008} _{-0.002}	0.021 max.
IMS026	0.120 ^{+0.012} _{-0.008}	0.240 ^{+0.012} _{-0.008}	0.035 max.
IMS202	0.360 ^{+0.008} _{-0.002}	0.140 ^{+0.008} _{-0.002}	0.035 max.
IMS204	0.440 ^{+0.008} _{-0.002}	0.180 ^{+0.008} _{-0.002}	0.035 max.
IMS206	0.520 ^{+0.008} _{-0.002}	0.220 ^{+0.008} _{-0.002}	0.035 max.
IMS208	0.560 ^{+0.008} _{-0.002}	0.240 ^{+0.008} _{-0.002}	0.035 max.
IMS210	0.620 ^{+0.008} _{-0.002}	0.270 ^{+0.008} _{-0.002}	0.035 max.



Specifications

Part number	Rated power (70°C)	WVDC (max)	Tolerances (%)
IMS024	1 W	350	1, 2, 5, 10
IMS026	1 W	1	10
IMS202	2 W	800	1, 2, 5, 10
IMS204	4 W	1100	1, 2, 5, 10
IMS206	6 W	1400	1, 2, 5, 10
IMS208	8 W	1500	1, 2, 5, 10
IMS210	10 W	1800	1, 2, 5, 10

Ordering Information

Example: 0.240" X 0.120," gold terminations, 100Ω, 5% tolerance

Example: IMS024	- 1 -	1000 J	
024	026		Tolerance
202	204		F - 1% G - 2%
206	208		J - 5% K - 10%
210			
Termination		Resistance value	
-1 Au		The first three digits are significant values. The fourth is the number of zeroes following. The R indicates a decimal point when the resistance value is less than 100Ω.	
-3 PtAg			
-C PtAg w/ 62/36/2 solder			
-P PtAg w/ 96/4 solder			

IMS Power ver.5 11/08 Specifications subject to change without notice.

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www.ims-
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