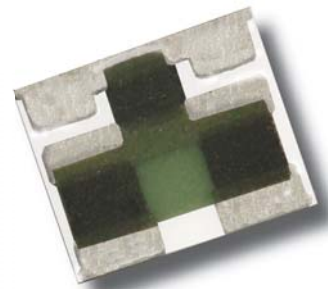


IMA Series Surface Mount Thick Film Attenuator

T-Pad Family

IMA Series T-Pad family surface mount thick film attenuators are compact, high performance devices especially suited to RF and microwave applications. Performance is based on the attenuator operating in a matched continuous 50 ohm system, with proper device mounting and workmanship.



IMA T-Pad Family Specifications

Standard Impedance:	50Ω Nominal
VSWR (Max):	1.25:1 up to 4 GHz 1.35:1 @ 4 to 8 GHz 1.50:1 @ 8 to 12 GHz
DC Attenuation Stability:	.0001 dB/ dB/ deg. C *
Power Rating:	2W (metalized baseplate maintained below 100° C)
Operating Temperature:	-55 deg. C to 150 deg. C
Frequency Range:	DC - 12.4 GHz
Standard Case Size:	0.122" X 0.145" X 0.028" Max
Architecture:	Thick Film on 96% Alumina (Al ₂ O ₃)

For other substrate thicknesses, sizes and power levels, consult the factory.

Attenuation Accuracy (DC)

Increment (dB)	Accuracy
1 - 3	+/- 0.2dB
4 - 19	+/- 0.3dB
20 - 30	+/- 0.5dB
31 - 40	+/- 1.0dB

At the circuit level, with proper application of RF principles, these attenuators, and their variations, are capable of operating up to 20 GHz with a manageable VSWR.

* Based on TCR and resistor tolerance at DC

Ordering Information

IMA2314-03D5 (Sample P/N)	
IMAXXXX-XXDX	
Part # (See Reverse)	dB Increment (0 denotes whole value) (5 denotes whole value + .5dB available to 9.5dB)
	dB Whole Value (00-40)

Up to
40dB

To
0.2dB
Accuracy

2W
Input Power

ims International Manufacturing Services, Inc.

Tel (401) 683-9700
Fax (401) 683-5571
e-mail: ims@ims-resistors.com
<http://www.ims-resistors.com>

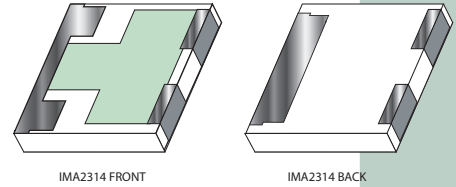
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Ver 1 05/2007 Specifications Subject to Change Without Notice

Wraparound Styles

IMA2314

Termination Style: Full Wraparound
 Termination Materials: Platinum Silver with Solder
 Attachment: Solder

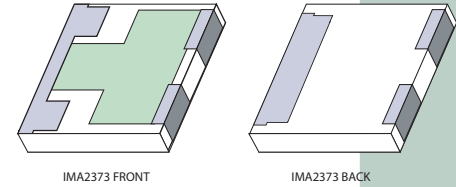


IMA2314 FRONT

IMA2314 BACK

✓ IMA2373

Termination Style: Full Wraparound
 Termination Material: Platinum Silver
 Attachment: Solder or Epoxy



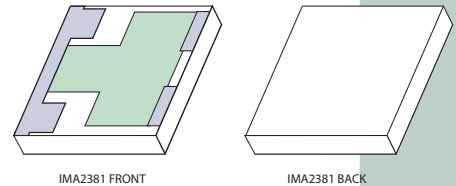
IMA2373 FRONT

IMA2373 BACK

Single-Sided Styles

✓ IMA2381

Termination Style: Single-Sided
 Termination Material: Platinum Silver
 Attachment: Solder or Epoxy

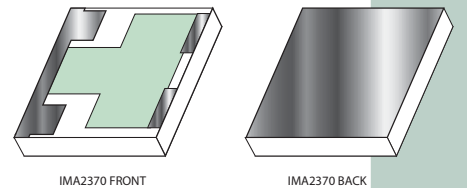


IMA2381 FRONT

IMA2381 BACK

IMA2370

Termination Style: Single-Sided with Backplane
 Termination Materials: Platinum Silver with Solder
 Attachment: Solder



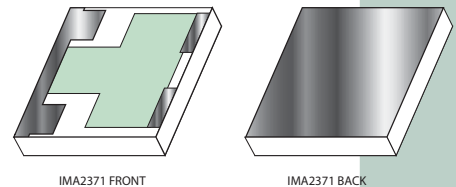
IMA2370 FRONT

IMA2370 BACK

Single-Wrap Style (SG)

IMA2371

Termination Style: Single-Wrap to Backplane
 Termination Materials: Platinum Silver with Solder
 Attachment: Solder



IMA2371 FRONT

IMA2371 BACK

S-Parameters, Mag. / Phase, 6dB T-Pad
1.0 To 10GHz - P/N: IMA2314-06D0
mounted to 0.015" thick, 50Ω alumina

FREQ (GHz)	S11 mag	S11 phase	S21 mag	S21 phase	VSWR
1.00	0.020	-91.995	0.501	-1.799	1.040
2.10	0.041	-92.998	0.501	-3.780	1.086
3.02	0.059	-94.046	0.500	-5.428	1.126
4.12	0.081	-95.361	0.499	-7.400	1.175
5.04	0.098	-96.473	0.497	-9.038	1.218
5.96	0.116	-97.588	0.496	-10.670	1.263
7.06	0.137	-98.926	0.494	-12.617	1.317
7.98	0.154	-100.035	0.492	-14.230	1.365
9.08	0.175	-101.358	0.489	-16.153	1.423
10.0	0.192	-102.451	0.486	-17.744	1.474



Indicates RoHS Compliant Part



Non-Magnetic

ims International Manufacturing Services, Inc.

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<http://www.ims-resistors.com>

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