

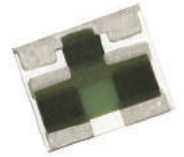
Surface Mount Thick Film Attenuator

ULR RoHS Sn62 NON-MAG

ITEM	SPECIFICATION
Standard Impedance:	50Ω Nominal
VSWR (Max)	1.25:1 up to 4GHz 1.35:1 up to 8GHz 1.50:1 up to 12GHz
DC Attenuation Stability: ¹	.001 dB/ dB/ °C
Operating Temperature:	-55°C to 150°C
Frequency Range:	DC - 12.4GHz
Standard Case Size:	0.122" x 0.145" x 0.028" Max
Architecture:	Thick Film on 96% Alumina (Al ₂ O ₃)

¹ Based on TCR and resistor tolerance at DC.
Consult the factory for other substrate thicknesses, sizes or power levels.

- 0.122" x 0.145" Size
- Characterized to 12.4GHz
- RoHS compliant or Sn62 solder available
- Attenuation to 40dB
- Half dB increments up to 16.5dB



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.

Attenuation Accuracy

Increment	Accuracy
1 - 3.5dB	+/- 0.2dB
4 - 19dB	+/- 0.3dB
20 - 30dB	+/- 0.5dB
31 - 40 dB	+/- 1.0dB

S-Parameters, Mag. / Phase, 6dB T-Pad

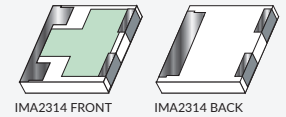
1.0 To 10GHz - P/N: IMA2314-06D0 mounted to 0.015" thick, 50Ω alumina

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

Wraparound Terminal Styles

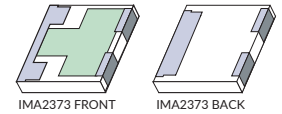
IMA2314

Terminal Style: Full Wraparound
Terminal Material: PtAg w/ Sn62 Solder
Attachment: Solder



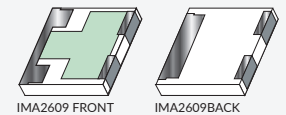
IMA2373

Terminal Style: Full Wraparound
Terminal Material: PtAg
Attachment: Solder or Epoxy



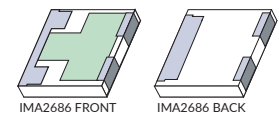
IMA2609

Terminal Style: Full Wraparound
Terminal Material: PtAg w/ Sn96 Solder
Attachment: Solder



IMA2686

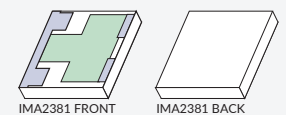
Terminal Style: Full Wraparound
Terminal Material: ULR PtAg
Attachment: Solder or Epoxy



Single-Sided & Single-Wrap Styles

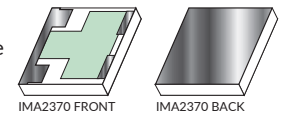
IMA2381

Terminal Style: Single-Sided
Terminal Material: PtAg
Attachment: Solder or Epoxy



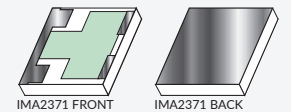
IMA2370

Terminal Style: Single-Sided with Backplane
Terminal Material: PtAg w/ Sn62 Solder
Attachment: Solder



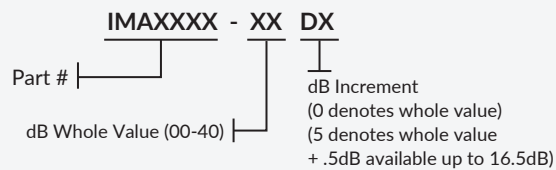
IMA2371

Terminal Style: Single-Wrap to Backplane
Terminal Material: PtAg w/ Sn62 Solder
Attachment: Solder



ORDERING INFORMATION

IMA2314-03D5 (Sample P/N)



Packaging: B=Bulk, T=Tape and Reel, W=Waffle
RoHS Compliant =
ULR = Ultra Leach Resistant

ULR RoHS Sn62 NON-MAG