imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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MAT10xxx Series

Attenuator DIE DC - 40 GHz

Features

- Medium Power Handling 2 W CW
- Flat Response from DC to 40 GHz
- Return Loss:
 - >18 dB DC to 12 GHz
 - >16 dB 13 to 40 GHz
- Space Saving Footprint: 0.030" x 0.030" (.762 x .762 mm)
- Very Good Stability Over Temperature (TRC <100 PPM)
- Ground Wrap to Top
 (No ground bonding required)
- RoHS* Compliant

Description

These fixed attenuator chips are fabricated using our state of the art thin film metallization and advanced photolithography technology.

All devices are available in chip form with a metalized ground connection on the back. This ground is wrapped around on the four corners of the chip so additional ground bonding ribbon is not required.

The chips may be attached using conductive epoxy or solder preform. Gold contacts on the input and output pads make assembly, using standard bonding equipment, fast and reliable. Custom values and configuration available on request.

Electrical Specifications: T_A = +25°C

Part Number	Attenuation (dB)	Insertion Loss (dB)	Return Loss (dB)
MAT10010	1	+/-0.30	>18
MAT10020	2	+/-0.30	>18
MAT10030	3	+/-0.30	>18
MAT10040	4	+/-0.30	>18
MAT10050	5	+/-0.30	>18

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* Restrictions on Hazardous Substances, European Union Directive 2011/65/EU.

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Rev. V3





Bonding pad sizes and resistor outline may differ from value to value.





MAT10xxx Series



Attenuator DIE DC - 40 GHz

Rev. V3

Electrical Specifications: T_A = +25°C

Part Number	Attenuation (dB)	Insertion Loss (dB)	Return Loss (dB)
MAT10060	6	+/-0.35	>18
MAT10070	7	+/-0.35	>18
MAT10080	8	+/-0.35	>18
MAT10090	9	+/-0.35	>18
MAT10100	10	+/-0.35	>18
MAT10110	11	+/-0.40	>18
MAT10120	12	+/-0.40	>18
MAT10130	13	+/-0.40	>18
MAT10140	14	+/-0.40	>18
MAT10150	15	+/-0.40	>18
MAT10160	16	+/-0.50	>18
MAT10170	17	+/-0.50	>18
MAT10180	18	+/-0.50	>18
MAT10190	19	+/-0.50	>18
MAT10200	20	+/-0.50	>18
MAT10210	21	+/-0.60	>18
MAT10220	22	+/-0.60	>18
MAT10230	23	+/-0.60	>18
MAT10240	24	+/-0.60	>18
MAT10250	25	+/-0.60	>18
MAT10260	26	+/-1.00	>18
MAT10270	27	+/-1.00	>18
MAT10280	28	+/-1.00	>18
MAT10290	29	+/-1.00	>18
MAT10300	30	+/-1.00	>18

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MAT10xxx Series

Attenuator DIE DC - 40 GHz



Rev. V3

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