



# Type:SDS3316

### Product Description

• 12.95×9.4mm Max.(L×W),5.08mm Max. Height.

Inductance Range: 1.0~1000.0 µH

- DCR range: 0.021~8.30Ω

In addition to the standards versions shown here,

custom inductors are also available to meet your exact requirements.

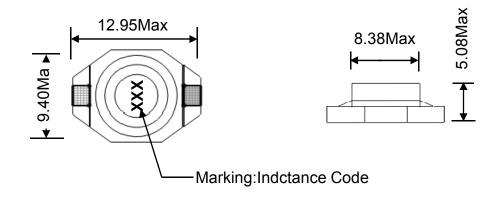
#### ◆ Feature

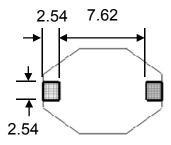
- Designed for the smallest possible size and high performance
- They are with high energy storage and very low resistance making them the ideal inductors for DC-DC conversion in the following applications
- DS 1608 used ceramic base with gold-plating
- Others used LCP plastic base

#### Application

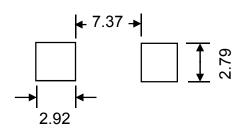
- Ideal for high performance DC/DC converter applications
- Computers
- LCD displays and telecommunication equipment.
- Especially those requiring shielding

#### Dimensions (mm)





#### Land Pattern (mm)





#### Power Inductors <SMD Type:SDS Series>

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## **♦** Specification

Suntek Part Number	System code	Inductance (µH)	L Test Freq. (KHz)	DCR Max. (Ω)	SRF typ (MHz)	Isat(A)	Irms(A)
SDS3316-102M		1.0	100	0.021	140	11.0	5.0
SDS3316-152M		1.5	100	0.022	120	9.5	4.5
SDS3316-222M		2.2	100	0.032	80	7.8	3.8
SDS3316-332M		3.3	100	0.039	70	6.0	3.3
SDS3316-472M		4.7	100	0.054	40	5.4	2.7
SDS3316-682M		6.8	100	0.075	38	4.5	2.2
SDS3316-822M		8.2	100	0.085	36	4.0	2.1
SDS3316-103M		10	100	0.101	35	3.5	2.0
SDS3316-153M		15	100	0.150	25	3.0	1.5
SDS3316-223M		22	100	0.207	19	2.0	1.3
SDS3316-333M		33	100	0.334	15	1.8	1.1
SDS3316-473M		47	100	0.472	13	1.4	0.8
SDS3316-683M		68	100	0.660	10	1.3	0.7
SDS3316-104M		100	100	1.110	7	1.2	0.6
SDS3316-154M		150	100	1.550	6	0.8	0.5
SDS3316-224M		220	100	2.000	5	0.7	0.37
SDS3316-105M		1000	100	8.300	2	0.32	0.17

**\*Description of Part Name** 

SDS3316-103M Inductance(L) Inductor size(Length x Height)

- 1. Inductance tested at 0.1 Vrms, 100 kHz, 0 Adc.
- 2. DC current at which the inductance drops 10% (typ) from its value without current.
- 3. Current that causes a 40°C temperature rise from 25°C ambient.
- 4. Ambient temperature range: -40°C to +85°C with Irms current; +85°C to +125°C with derated current
- 5. Storage temperature range: Component: -40°C to +125°C Packaging: -55°C to +80°C
- 6. Resistance to soldering heat: Three reflows at >217°C for 90 seconds
- (+260°C ±5°C for 20 40 seconds), allowing parts to cool to room temperature between.
- 7. Electrical specifications at 25°C.