

# **SMD Power Inductor Series**



## FEATURES **▼**RoHS **P**6

- Magnetic shielded structure
- Low DCR and high efficiency
- Low profile and small size
- High reliability
- AEC-Q200 qualified

### **APPLICATIONS**

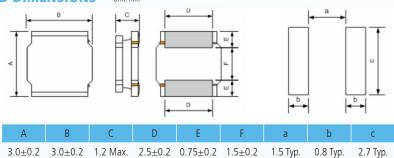
- DC-DC converters and power suppliers
- LCD TV's, Blu-ray and gaming consoles
- Tablets, notebooks, servers and printers
- Smart phones, GPS, set top box and base stations
- LED lighting
- Automotive

### **ELECTRICAL SPECIFICATIONS**

PART NO.	INDUCTANCE (µH)	Rdc (Ω)±30%	SATURATION CURRENT <sup>5</sup> (A)	RMS CURRENT <sup>4</sup> (A)	SRF MHZ (REF)
TYS30121R0N-10	1.0	0.040	1.87	2.20	120
TYS30121R5N-10	1.5	0.045	1.62	2.01	110
TYS30122R2N-10	2.2	0.075	1.20	1.55	84
TYS30123R3M-10	3.3	0.100	1.05	1.36	64
TYS30124R7M-10	4.7	0.120	0.90	1.24	61
TYS30126R8M-10	6.8	0.190	0.75	0.98	61
TYS3012100M-10	10	0.265	0.60	0.83	42
TYS3012150M-10	15	0.460	0.45	0.71	27
TYS3012220M-10	22	0.645	0.42	0.53	23
TYS3012330M-10	33	0.875	0.36	0.46	18
TYS3012470M-10	47	1.450	0.27	0.35	14
TYS3012680M-10	68	1.670	0.24	0.33	12
TYS3012101M-10	100	2.860	0.21	0.25	12

- Electrical specifications at 20°C. Tolerance: M: ±20%, N:±30%
- Inductance tested at 100 KHz, 1V
- RMS Current is defined based on temperature rise up to or less than 40°C from 20°C ambient
  Saturation Current is the DC current at which the inductance drops approximate 30% from its value without current
  Operate temperature range: -40°C ~ +125°C (including self-temperature rise)
- Storage temperature range (packaging conditions): -10°C~+40°C and RH 70%(MAX.)

### **SHAPES AND DIMENSIONS**



USA: +1.866.928.8181 Europe: +49.0.8031.2460.0 Asia: +86.755.2714.1166

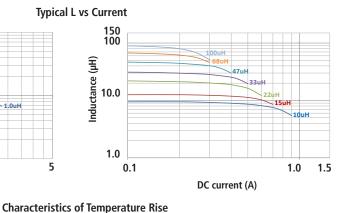
Smart Technology. Delivered.

# **TYS3012**

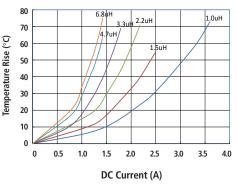
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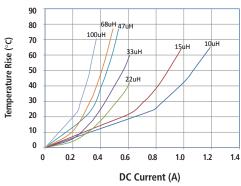
### TYPICAL ELECTRICAL CHARACTERISTICS

# Typica 10 6.8uH 4.7uH 3.3uH 2.2uH 1.5uH 0.1 0.5 DC current (A)



# 2.2µH 1,0µH 90

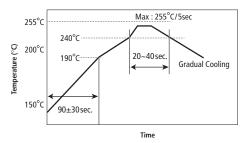




### **PACKAGING INFORMATION**

- Standard Tape and Reel Quantity (PCS) = 2000
- Reel Size = 7 inches

### **Temperature Profile of Reflow Soldering**



### **ORDERING INFORMATION**

### PART NUMBER EXAMPLE



SIP-DS-TYS 3012 0413

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