

### Features

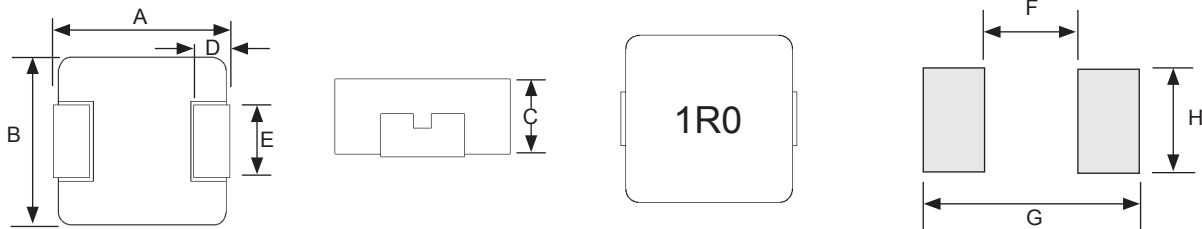
- Shielded metal composite power inductors
- RoHS compliant
- High saturation current (~ 65 amps)
- High efficiency (2x improvement over ferrite core inductors)
- Low profile

### CHARACTERISTICS

Case Code	74	147	104	187
Inductance Range ( $\mu\text{H}$ )	1.0 ~ 4.7	10	6.8 ~ 10	22
Operating Temperature Range (Ambient + Self-Heating)	-55°C ~ +125°C			
Temperature Rise at Irms	+40°C			
Inductance Change at Isat	-20%		-30%	
Inductance Tolerance	$\pm 20\%$ (M), $\pm 30\%$ (Y)		$\pm 20\%$ (M)	

### DIMENSIONS (mm)

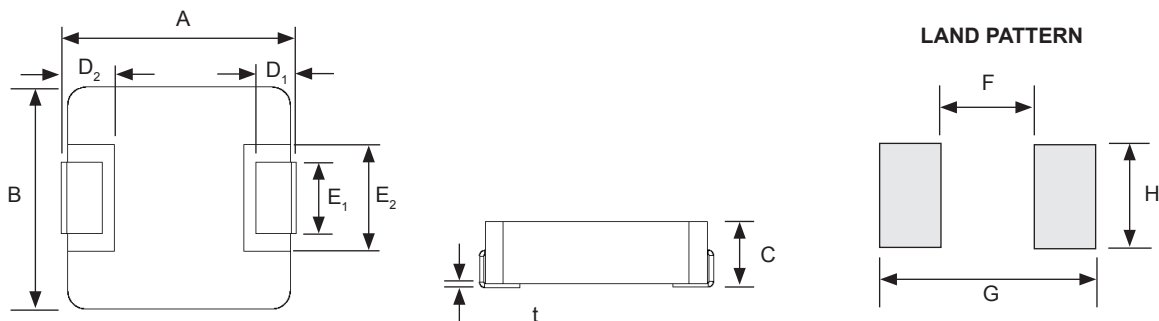
Size	A	B	C	D	E	F	G	H
74	$7.3 \pm 0.3$	$6.6 \pm 0.3$	$2.8 \pm 0.2$	$1.8 \pm 0.3$	$3.0 \pm 0.3$	2.5	8.4	3.5
147	$13.4 \pm 0.5$	$12.5 \pm 0.3$	$6.8 \pm 0.2$	$2.3 \pm 0.3$	$3.0 \pm 0.5$	8.0	14.5	5.0



LAND PATTERN

### CASE AND LAND PATTERN DIMENSIONS

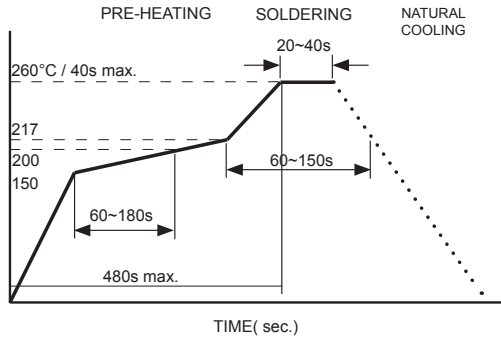
Size	A	B	C	D <sub>1</sub>	D <sub>2</sub>	E <sub>1</sub>	E <sub>2</sub>	t	F	G	H
104	$10.85 \pm 0.35$	$10.0 \pm 0.3$	$3.8 \pm 0.2$	$2.0 \pm 0.5$	$2.5 \pm 0.1$	$3.0 \pm 0.5$	$5.0 \pm 0.2$	0 ~ +0.15	5.4	13.6	4.1
187	$17.15 \pm 0.35$	17.15 max.	$6.8 \pm 0.2$	$2.5 \pm 0.5$	$3.5 \pm 0.1$	$12.0 \pm 0.3$	$13.0 \pm 0.5$	0 ~ 0.30	11.2	18.2	12.8



LAND PATTERN

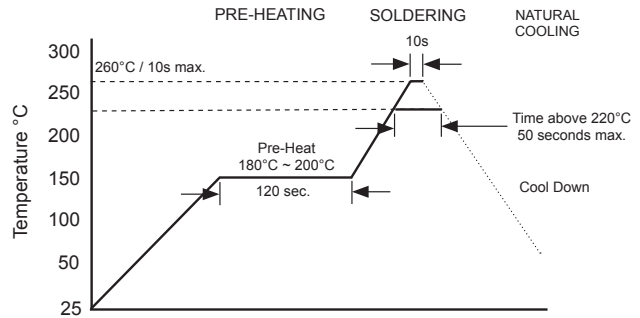


**CASE SIZES 74 & 147  
REFLOW SOLDERING PROFILE**



REFLOW TIMES: 3X MAX.

**CASE SIZE 104 & 187  
REFLOW SOLDERING PROFILE**



Article	STANDARD VALUES - CASE SIZE 74 (7.3 x 6.6 x 2.8)					Test Frequency
	Inductance Value (μH)	Typ. DCR (mΩ)	Max. DCR (mΩ)	DC Current Irms (Amps)	DC Current Isat (Amps)	
123-4652	1.00 ± 20%	8.3	10	11.0	22.0	100KHz
123-4653	2.20 ± 20%	18	20	8.0	14.0	
123-4654	4.70 ± 20%	37	40	5.5	10.0	

Maximum +40°C temperature rise at Irms. Typical -20% inductance change at Isat

Article	STANDARD VALUES - CASE SIZE 147 (13.9 x 12.8 x 7.0)					Test Frequency
	Inductance Value (μH)	Typ. DCR (mΩ)	Max. DCR (mΩ)	DC Current Irms (Amps)	DC Current Isat (Amps)	
123-4655	10 ± 20%	13.2	16.8	10.0	15.5	100KHz

Maximum +40°C temperature rise at Irms. Typical -20% inductance change at Isat

Article	STANDARD VALUES - CASE SIZE 104 (10.85 x 10.0 x 3.8mm)				Test Frequency
	Inductance Value (μH)	DC Resistance (mΩ) max.	DC Current Irms (Amps)	DC Current Isat (Amps)	
123-3413	6.8 ± 20%	25.0	7.0	12	100KHz
123-3422	10 ± 20%	30.0	7.5	8.5	

Maximum +40°C temperature rise at Irms. Typical -30% inductance change at Isat.

Article	STANDARD VALUES - CASE SIZE 187 (17.15 x 17.15 x 6.8mm)				Test Frequency
	Inductance Value (μH)	DC Resistance (mΩ) max.	DC Current Irms (Amps)	DC Current Isat (Amps)	
123-4772	22 ± 20%	23.0	9.5	11	100KHz

Maximum +40°C temperature rise at Irms. Typical -30% inductance change at Isat.



**CARRIER TAPE & REEL DIMENSIONS (mm)**

Size	Qty/Reel	Reel Dia.	Ao	Bo	Co	Po	Ko	t	W
74	1,000	330	7.0 ± 0.10	7.7 ± 0.10	7.5 ± 0.10	12.0 ± 0.10	3.3 ± 0.10	0.35 ± 0.05	16.0 ± 0.30
147	400	330	13.5 ± 0.10	14.2 ± 0.10	11.5 ± 0.10	20.0 ± 0.10	7.3 ± 0.10	0.50 ± 0.05	24.0 ± 0.30
104	500	330	10.7 ± 0.10	12.0 ± 0.10	11.5 ± 0.10	16.0 ± 0.10	4.5 ± 0.10	0.35 ± 0.05	24.0 ± 0.30
187	200	330	17.45 ± 0.10	17.8 ± 0.10	11.5 ± 0.10	24.0 ± 0.10	7.3 ± 0.15	0.50 ± 0.05	24.0 ± 0.30

