

SMD Power Inductors - ESI01



- Energy storage, smoothing, filtering
- Applied standards: ECSS-Q-ST-70-02C, MIL-STD-202, DO-160 and ESCC 3201 generic specification for space products
- Materials meet UL94-V0 rating
- Suited for IR and vapor reflow soldering
- Frequency range up to 1 MHz
- Operating temperature range: -55 °C to +125 °C
- Weight: <2 grams

Electrical Data (25°C)

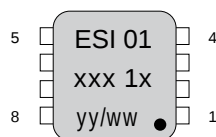
ID Code	Inductance (μH)	permanent (ADC)	DCR at 25°C (mΩ)	Tol.
ESI 01 2K7 1x	2.68	2.1	24	10
ESI 01 4K2 1x	4.20	1.7	35	
ESI 01 7K1 1x	7.10	1.2	65	
ESI 01 12K 1x	12	1.1	86	
ESI 01 17K 1x	16.8	0.93	124	
ESI 01 22K 1x	22	0.76	184	
ESI 01 31K 1x	31	0.63	270	
ESI 01 48K 1x	48	0.49	440	
ESI 01 64K 1x	64	0.41	630	
ESI 01 81K 1x	81	0.39	710	
ESI 01 M10 1x	100	0.33	1000	
ESI 01 M15 1x	151	0.26	1550	

To Order

ESI01	###	1	x
SMD Energy Storage Inductor	Value code 2K7 = 2.7 μH M10 = 100 μH	Version	x = J J led x = W W Terminals

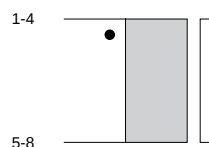
ESI01 ### 1x

Marking



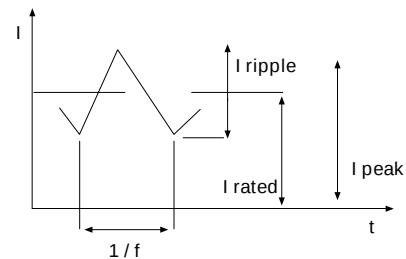
yyww :
Date code

Connections

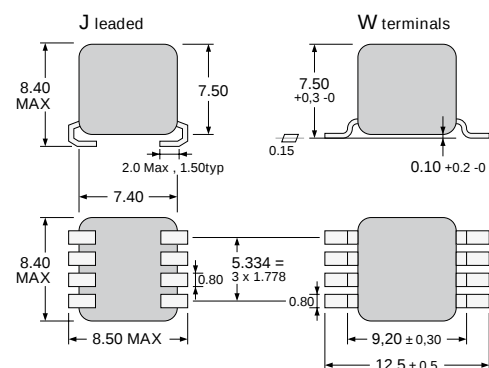


Notes

1. Inductance at 20 mV, 10 kHz with WK3260B impedance analyser
2. Typical inductance value at recommended full load
3. I_{peak} max = maximum peak value of current at +125 °C; L value not guaranteed
4. 10 % admissible I ripple over I rated at f=200 kHz
5. Isolation voltage 150 Vdc
- 1 min - Ri > 100 MΩ between winding and magnetic core



Dimensions (mm)

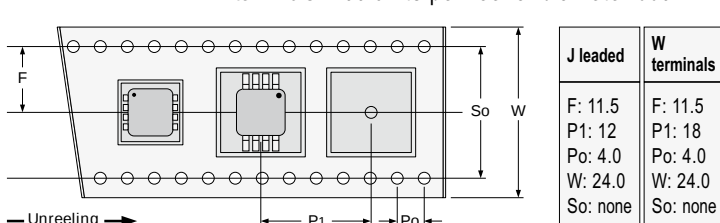


Packaging

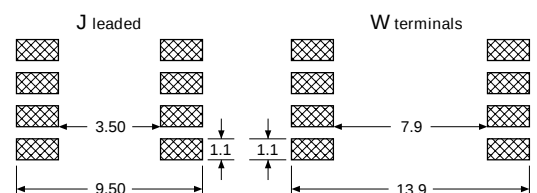
Tape and Reel:

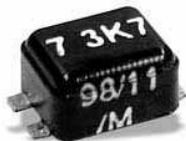
J led - 600 units per reel of diameter 330 mm

W terminals - 400 units per reel of diameter 330 mm



PCB Layout (suggested)





SMD Power Inductors - ESI7

- Energy storage, smoothing, filtering
- Applied standards: ECSS-Q-ST-70-02C, MIL-STD-202, DO-160 and ESCC 3201 generic specification for space products
- Materials meet UL94-V0 rating
- Suited for IR and vapor reflow soldering
- Frequency range up to 1 MHz
- Operating temperature range: -55 °C to +125 °C
- Weight: ≤2 grams

Electrical Data (25°C)

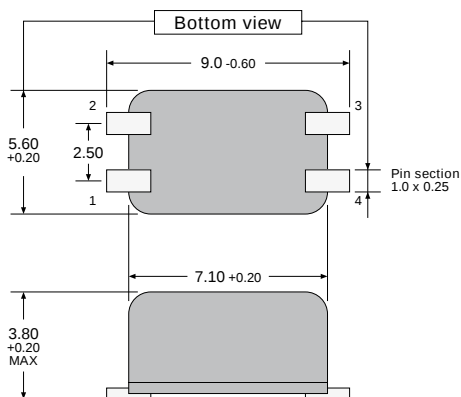
ID Code	Inductance (μH)	permanent (ADC)	I _{peak} A	DCR at 25°C (mΩ)	Tol.
ESI 7 K42 1S	0.42	2.9	6.0	7.5	25
ESI 7 K65 1S	0.65	2.4	5.0	11	
ESI 7 1K2 1S	1.27	1.6	3.6	23	
ESI 7 2K1 1S	2.10	1.3	2.8	36	
ESI 7 3K7 1S	3.74	1.0	2.0	59	
ESI 7 5K0 1S	5.09	0.78	1.8	107	
ESI 7 8K4 1S	8.42	0.60	1.4	177	

To Order

ESI 7 ### 1S

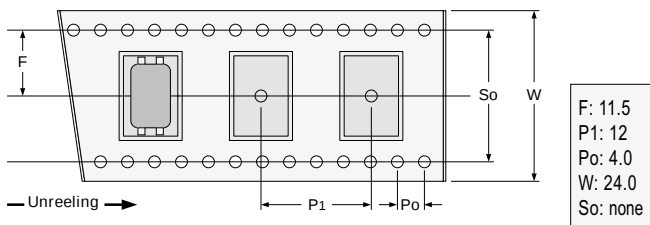
ESI7	###	1	S
SMD Energy Storage Inductor	Value code K42 = 0.42 μH 2K1 = 2.1 μH	Version	SMD Terminals

Dimensions (mm)



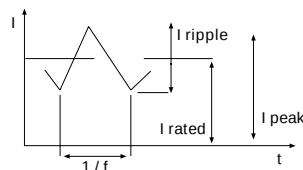
Packaging

Tape and Reel:
1300 units per reel of diameter 330 mm

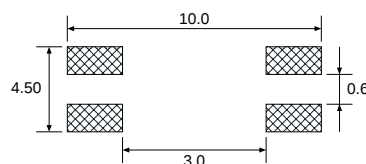


Notes

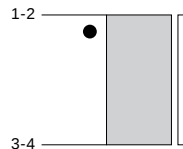
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2. Typical inductance value at recommended full load
3. I_{peak} max = maximum peak value of current at +125 °C; L value not guaranteed
4. 10 % admissible I ripple over I rated at f=200 kHz
5. Isolation voltage 150 Vdc
- 1 min - R_i > 100 MΩ between winding and magnetic core



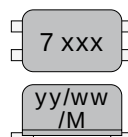
PCB Layout (suggested)



Connections



Marking



yyww : Date code
M : Microspire

