

# SMD Power Inductors ESI 7



- Energy storage, smoothing, filtering
- Applied standards: ECSS-Q-ST-70-02C, MIL-STD-202, D0-160 and ESCC 3201 generic specification for space products
- Materials meet UL94-V0 rating
- Suited for  $I_R$  and vapor reflow soldering
- Frequency range up to 1 MHz
- Operating temperature range:  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$
- Weight:  $\leq 0.5$  grams

## Electrical Data (25°C)

ID Code	Inductance ( $\mu\text{H}$ )	permanent ( $A_{DC}$ )	$I_{\text{peak}}$ A	$R_{DC}$ max. at 25°C (m $\Omega$ )	Tol. (%)
ESI 7 K42 1S	0.42	2.9	6.0	7.5	20
ESI 7 K65 1S	0.65	2.4	5.0	11.5	
ESI 7 1K2 1S	1.27	1.6	3.6	20.7	
ESI 7 2K1 1S	2.10	1.3	2.8	39	
ESI 7 3K7 1S	3.74	1.0	2.0	64	
ESI 7 5K0 1S	5.09	0.78	1.8	115	
ESI 7 8K4 1S	8.42	0.60	1.4	187	

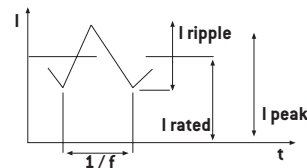
## To Order

ESI 7 ### 1S

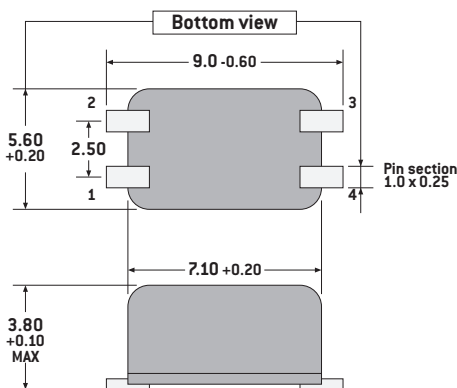
ESI7	###	1	S
SMD Energy Storage Inductor	Value code K42 = 0,42 $\mu\text{H}$ 2K1 = 2.1 $\mu\text{H}$	Version	SMD Terminals

## Notes

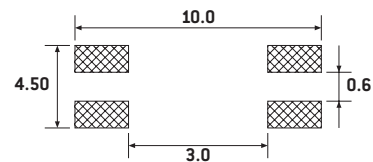
1. Inductance at 10 mV, 10 kHz with WK 3260B impedance analyzer
2. Typical inductance value at recommended full load
3.  $I_{\text{peak max}}$  = maximum peak value of current at  $+125^{\circ}\text{C}$ ; L value not guaranteed
4. 10 % admissible I ripple over  $I_{\text{rated}}$  at  $f = 200$  kHz
5. Isolation voltage 150  $V_{DC}$   
- 1 min -  $R_i > 100$  M $\Omega$  between winding and magnetic core



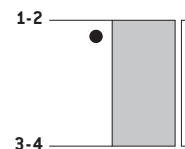
## Dimensions (mm)



## PCB Layout (suggested)

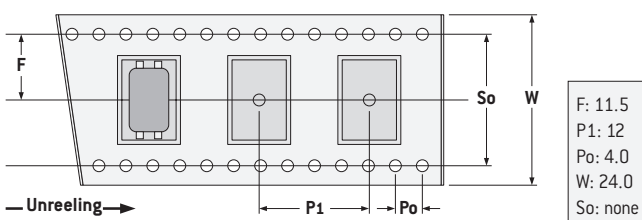


## Connections



## Packaging

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



## Marking

