Large Current Coil type EMI Filters (Digital Noise Filters) SMD

Series: **ELKEA**

■ Features

- 3218 case size, 5 A rated current.
- No variation in attenuation characteristics as current changes.
- The stable P/N marking using laser technology makes the part number check easier.



Operating temperature : -20 to +85 °C

● Rated Voltage : DC 50 V (Except ELKEA333FA : DC25 V)

Rated Current : DC 5 A

Reliability characteristics endurance (High Temp.)

Soldering condition (reflow): 85 °C 50 V 2 A 1000 h (Spec: 500 h)

■ Standard Parts

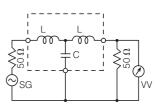
Part No.	Cut off frequency (MHz)	Inner Capacitance (pF typ.)	Rated Voltage (V)	Rated Current (A)	Indication		min. Packaging unit (pcs.)
ELKEA100FA	500	10			100□		
ELKEA220FA	300	22	50	50 5.0	220□	Indication 2	2000
ELKEA470FA	150	47			470□		
ELKEA101FA	70	100			101□		
ELKEA221FA	30	220			221□		
ELKEA471FA	15	470			471□		
ELKEA102FA	7	1000			102□		
ELKEA222FA	3	2200			222□		
ELKEA103FA	0.5/DC	10000			103□		
ELKEA333FA	0.2/DC	33000	25		333□	Indication 2	

note1 : 4th letter (\square) of marking indicates the Month Code. note2 : Indication 1, 2 refer to Indication examples.

■ Equivalent circuit, measurement block diagram

■ Performance characteristics (Reference)

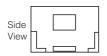
ELKEA□□□FA 10 0 100 -10 222 Attenuation (dB) -20 103 -30 -40 -50 -60 10 100 1000 10000 Frequency (MHz)



■ Indication Examples

Indication 1

Top View 103P ELKEA103FA



Indication 2

ELKEA100FA
ELKEA470FA
ELKEA4101FA
ELKEA221FA
ELKEA471FA
ELKEA471FA
ELKEA102FA
ELKEA222FA
ELKEA222FA
ELKEA333FA

1 0 3 P

Month Code : 1 Letter

Inner Capacitance : 3 Letters

Coil type EMI Filters (Digital Noise Filters)

Series: **ELKE**

■ Features

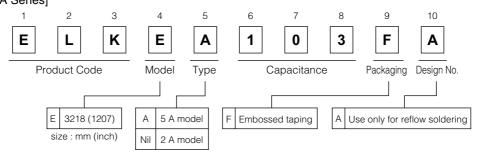
- 3218 case size, 5 A rated current (ELKEA) and 2 A rated current (ELKE).
- High ESD suppression with varistor and included coils.
- No variation in attenuation characteristics as current changes.
- ◆ The stable P/N marking using laser technology makes the part number check easier.



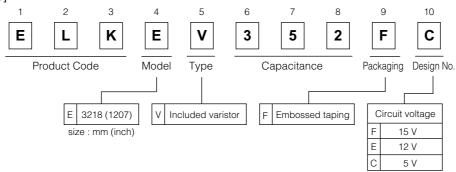
■ Recommended Applications

• Data lines, secondary power supply lines (DC lines) for game, digital AV and communications equipment.

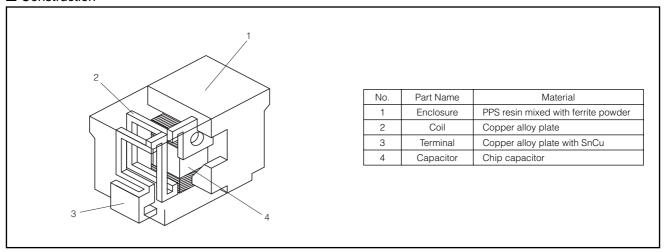
■ Explanation of Part Numbers [ELKE, ELKEA Series]



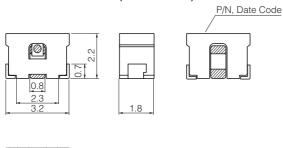
[ELKEV Series]



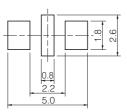
■ Construction



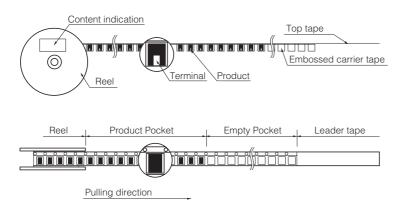
■ Dimensions in mm (not to scale)



■ Land Pattern in mm (not to scale)



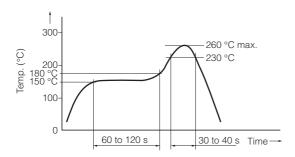
■ Packaging state



Reel Size : ϕ 178

Q'ty : 2000 pcs./Reel Packaging : Embossed taping

■ Soldering conditions for reflow



■Storage Conditions

◆ Package
 : Normal temperature (-5 to 35 °C), normal humidity (85 %RH max.), shall not be exposed to direct sunlight and harmful gases and care should be taken so as not to cause dew.

● Operating Temperature : -20 to +85 °C

Storage Period

Solderability may be reduced due to the conditions of high temperature and high humidity which causes the oxidation of tin-plated terminals. Even if storage conditions are within specified limits, solderability may be reduced with the passage of time. Therefore, please control the storage conditions and try to use the product within 6 months of receipt.