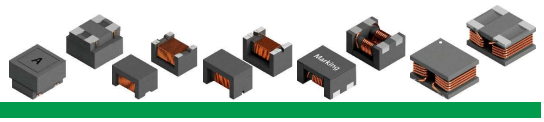
An ISO 9001 Company

COMMON MODE INDUCTORS
– EF4P3216 SERIES



●FEATURE

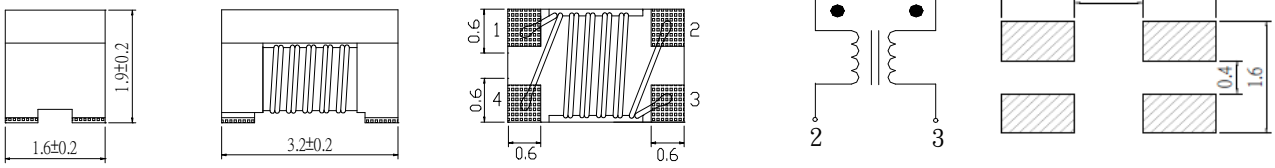
1. High common mode impedance at high frequency effects excel noise suppression performance
2. Suitable for differential signal line like USB2.0, IEEE 1394 and LVDS

●Applications

1. Ideal for use as common-mode chokes for USB1.1/USB2.0/IEEE 1394 interface

●Shape and Dimension and Schematics and Land Patterns(mm)

EF4P 3216 (1206)



●Specification

Dimension in m/m

PART NO.	Common Mode Impedance (ohm) (tolerance±25%)	Rated Current (mA)	Rated Voltage (Vdc)	Insulation Resistance (M ohm)	Withstand Voltage (Vdc)	DC Resistance (max.) (ohm)
EF4P 3216-670	67 (Typ.) at 100MHz	500	50	10 min	125	0.30
EF4P 3216-750	75 (Typ.) at 100MHz	500	50	10 min	125	0.30
EF4P 3216-900	90 (Typ.) at 100MHz	500	50	10 min	125	0.30
EF4P 3216-101	100 (Typ.) at 100MHz	500	50	10 min	125	0.30
EF4P 3216-121	120 (Typ.) at 100MHz	370	50	10 min	125	0.30
EF4P 3216-161	160 (Typ.) at 100MHz	340	50	10 min	125	0.40
EF4P 3216-181	180 (Typ.) at 100MHz	340	50	10 min	125	0.40
EF4P 3216-261	260 (Typ.) at 100MHz	310	50	10 min	125	0.50
EF4P 3216-371	370 (Typ.) at 100MHz	280	50	10 min	125	0.40
EF4P 3216-601	600 (Typ.) at 100MHz	260	50	10 min	125	0.80
EF4P 3216-102	1000 (Typ.) at 100MHz	230	50	10 min	125	1.00
EF4P 3216-222	2200 (Typ.) at 100MHz	200	50	10 min	125	1.20

Note1. Measurement ambient temperature of electrical : at 20℃

Note2. Test equipment: HP4291A

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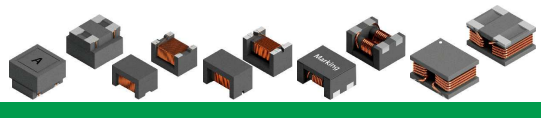
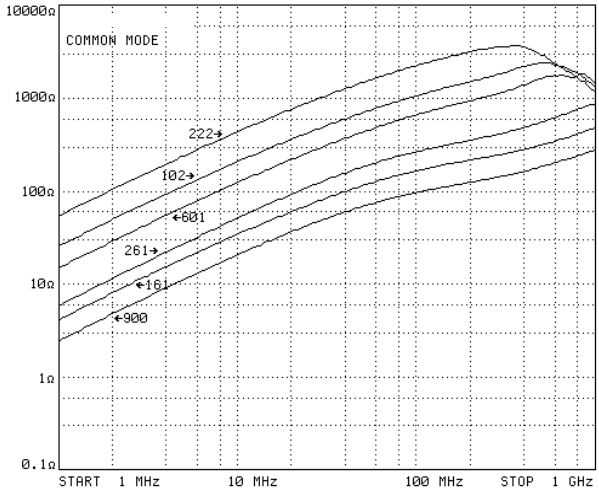
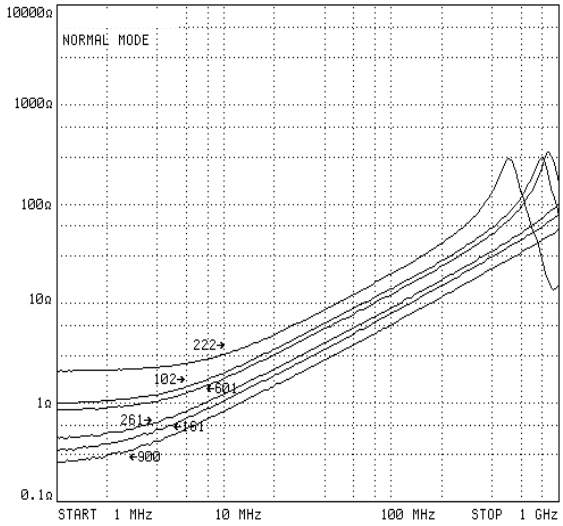


●EF4P 3216

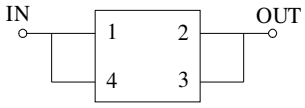
Common mode curve



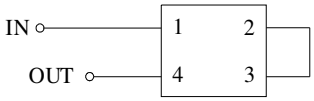
Normal mode curve



●Test circuit



COMMON MODE



NORMAL MODE

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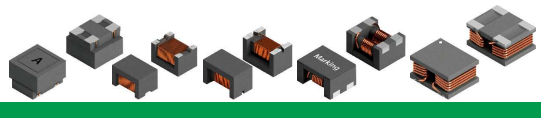
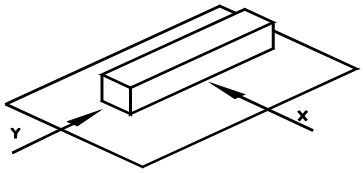


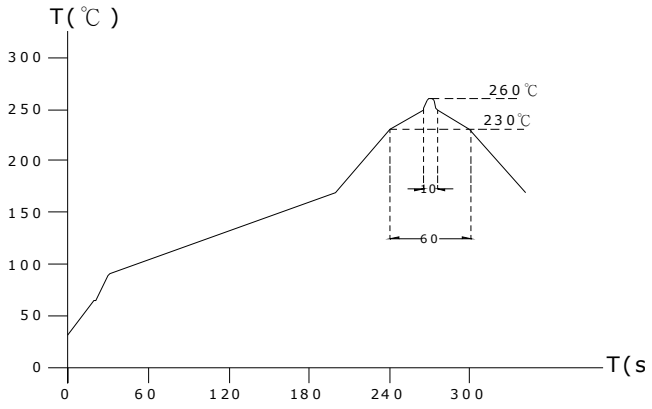
GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 125℃(Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has no external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Ywithstanding at below conditions.
   Terminal should not peel off. (refer to figure at right) 0.5kg Min –EF4P3216.



4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
6. Temperature characteristics: Inductance coefficient (0~2,000)x10-6/℃(-25~+80℃).
7. Humidity characteristics(Moisture Resistance): Inductance deviation within ±5%, after 96 hours in 90~95% relative humidity at 40 ±2℃and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within ±5%, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within ±5%, after being dropped once with 981m/s2 (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260℃, 10 seconds(See attached recommend reflow)
11. Storage environment: Storage condition: Temperature Range: 10℃ ~ 35℃ (Generally: 21℃ ~ 31℃) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35℃ ~ 85℃ , Humidity Range: 50% ~ 95% RH
12. Use components within 12 months. If 12 months or more have elapsed, check solderability before use.
13. Reflow profile recommend:

Lead-free heat endurance test



Lead-free the recommended reflow condition