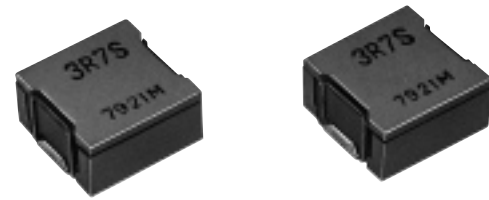## Power Choke Coil

Series: **PCC-F179F (S1)**

Japan
Singapore

Thin, light and high power type made possible by
our original unique winding and core shape technology

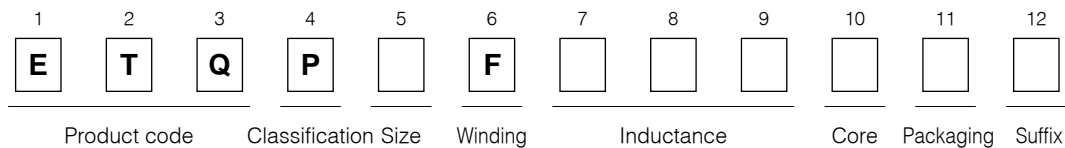Suitable for large current demands of PC servers

■ Features
● High power type (Saturation currents up to 42.3 A)
  Its low loss is due to our low resistive technology
● Thin (9.0 mm height), Light weight (9.9 g)
● Low leakage flux
● RoHS Compliant

■ Recommended Applications
● PC(Server) DC/DC converters for driving CPU at high speed
● Thin type on-board power supply module for converters (30 to 80 W)
  Also suitable as a smoothing choke coil

■ Explanation of Part Numbers

1	2	3	4	5	6	7	8	9	10	11	12
E	T	Q	P		F						

| Product code | Classification Size | Winding | Inductance | Core | Packaging | Suffix |

■ Examples

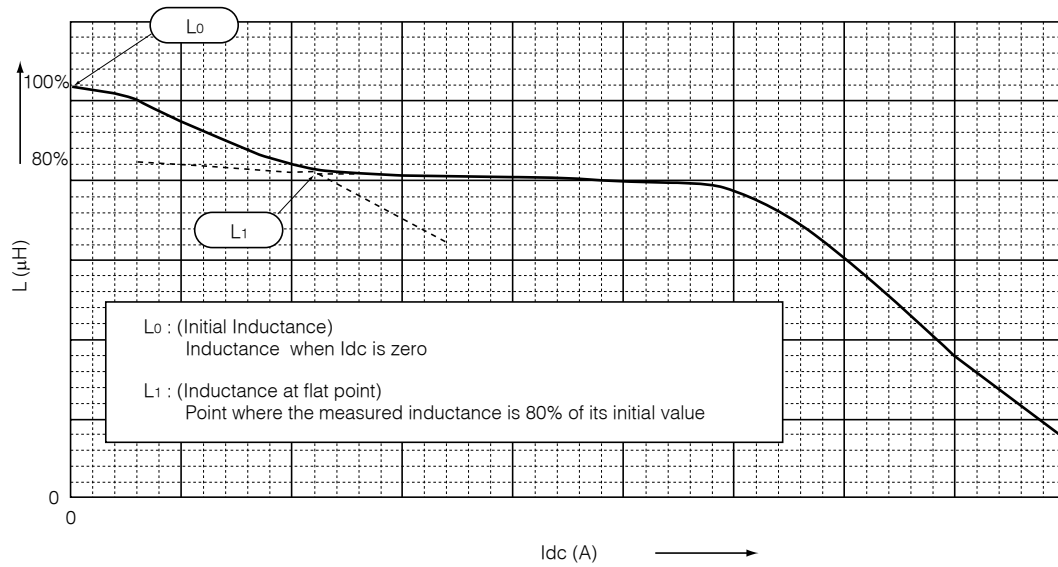| Parts No.	Type	Initial inductance at 25 °C		Inductance at flat point at 25 °C		Saturation current		Heat reference current ΔT=40 K	DC resistance at 20 °C
						at 25 °C	at 100 °C		
		L_0 (μH)	Tol. (%)	L_1 (μH)	Tol. (%)	I sat (A) min.	I sat (A) min.	I_0 (A)	DCR (mΩ) max.
ETQPAF1R2HF□	HL	2.9	±30	1.2	±30	21.4	18.0	22.6	1.00
ETQPAF2R7HF□		4.6		2.7		15.5	12.5	17.5	1.56
ETQPAF4R8HF□		6.8		4.8		10.6	9.0	14.4	2.29
ETQPAF7R2HF□		9.7		7.2		8.6	7.3	12.0	3.31
ETQPAF0R7EF□	EX	1.9	±25	0.7	±25	50.4	42.3	22.6	1.00
ETQPAF1R3EF□		2.9		1.3		35.2	28.5	17.7	1.56

Notes: Inductance is measured at 100 kHz

See Figure 1 for the following:

    1) For the definition of L_0 & L_1, please refer to the next page.

    2) Saturation current (I sat) is the current value that inductance (L1) decreases to 80% of initial value

    3) Case heating current is the value of the current at which the temperature of the coil case rises
       40 degrees Celsius above its initial temperature with T(ambient)=25C

Rev.02/04

■ Figure 1: L₀,L₁:Definition

DC Bias Characteristic

L₀

100%

80%

L₁

L (μH)

L₀ : (Initial Inductance)
     Inductance when Idc is zero

L₁ : (Inductance at flat point)
     Point where the measured inductance is 80% of its initial value

0

0

Idc (A)

■ Figure 2: Dimensions in mm(not to scale)

17.2±0.3

16.8±0.4

(6.0)

Date code

MARKING

9.0 max.

( ) : Reference value

0.7 min.

2.7 min.

0.05 min.:Clearance between
          the Terminal surface
          and the case surface

9.4±0.2

6.5±0.1

9.6±0.2

1.5±0.2

(14.2)

1.5±0.2

0.3 min.:Clearnce between
         the Terminal surface
         and the surface of the molded resin case

2.0±0.2