

APRH 8D38 and APRH 8D43 TYPE

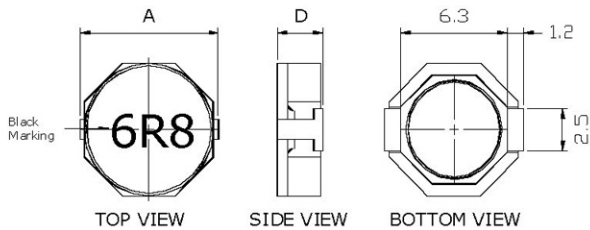
●FEATURE

1. High current capacity and Low DCR
2. Magnetic shielded for low radiation

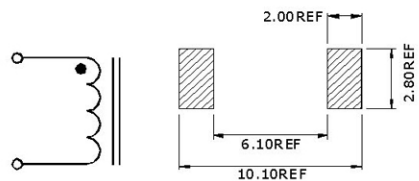
●Applications

1. Portable telephone, Personal Computer
2. Set top box, and other electronic equipment

●Shape and Dimension



●Schematics and Land Patterns(mm)



A=8.30m/m MAX ; D=4.00m/m MAX ; MARKING= Inductance value

●Specification

P/N	L (μ H)	Marking	RDC (m Ω)Max	Isat (A)	Irms (A)
APRH8D38-1R8□	1.8	1R8	15.6	7.00	6.80
APRH8D38-2R5□	2.5	2R5	17.5	6.50	6.00
APRH8D38-3R5□	3.5	3R5	24	5.00	5.20
APRH8D38-4R7□	4.7	4R7	29	4.60	4.40
APRH8D38-6R0□	6.0	6R8	32	4.20	4.00
APRH8D38-100□	10	100	48	3.00	3.20
APRH8D38-150□	15	150	67	2.75	2.50
APRH8D38-220□	22	220	105	2.30	2.00
APRH8D38-330□	33	330	157	1.75	1.60
APRH8D38-470□	47	470	189	1.52	1.42
APRH8D38-680□	68	680	290	1.30	1.08
APRH8D38-101□	100	101	410	1.05	0.88

Note1. Measurement frequency of Inductance value : at 100KHz

Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

Note3. Isat: DC current at which the inductance drops 35%(max) from its value without current

Note4. I rms: Average current for 40°C temperature rise from 25°C ambient

Note5. Inductance tolerance: N: \pm 30% ; M: \pm 20%

Note6. Ordering Code: TYPE NAME: APRH8D38

Main Inductance: 100 (10uH)

Tolerance : M ($\pm 20\%$)

Note7.Packaging: Taping ; Quantity: APRH8D38:1000 Pieces/reel

APRH 8D43 TYPE

A=8.30m/m MAX ; D=4.50m/m MAX ; MARKING= Inductance value

●Specification

P/N	L (μH)	Marking	RDC (Ω)Max	Isat (A)	Irms (A)
APRH8D43-2R0□	2.0	2R0	14m	7.00	5.50
APRH8D43-3R9□	3.9	3R9	19m	5.90	4.50
APRH8D43-4R7□	4.7	4R7	22m	5.60	4.10
APRH8D43-6R8□	6.8	6R8	25m	4.40	3.90
APRH8D43-100□	10	100	36m	4.00	3.20
APRH8D43-150□	15	150	53m	2.90	2.30
APRH8D43-220□	22	220	75m	2.60	1.80
APRH8D43-330□	33	330	125m	2.20	1.40
APRH8D43-470□	47	470	150m	1.80	1.30
APRH8D43-680□	68	680	240m	1.50	1.00
APRH8D43-101□	100	101	360m	1.30	800m

Note1. Measurement frequency of Inductance value : at 100KHz, 0.25V

Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

Note3. Isat: DC current at which the inductance drops 35%(max) from its value without current

Note4. Irms: Average current for 40°C temperature rise from 25°C ambient

Note5. Inductance tolerance: N: $\pm 30\%$; M: $\pm 20\%$

Note6. Ordering Code: TYPE NAME: APRH8D43

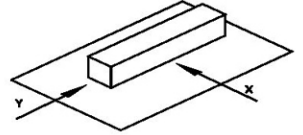
Main Inductance: 100 (10uH)

Tolerance : M ($\pm 20\%$)

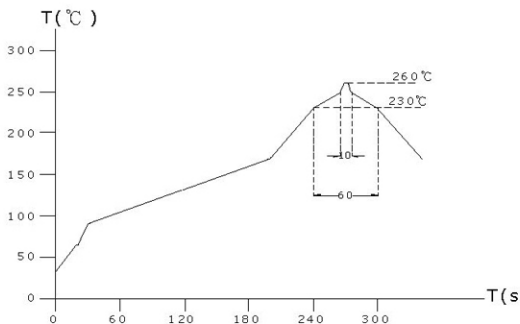
Note7.Packaging: Taping ; Quantity: APRH8D43:1000 Pieces/reel

GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO $+85^{\circ}\text{C}$ (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at below conditions.
Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.
4. Insulating resistance: Over $100\text{M}\Omega$ 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 $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ ($-25\sim +80^{\circ}\text{C}$).
7. Humidity characteristics (Moisture Resistance): Inductance deviation within $\pm 5\%$, after 96 hours in $90\sim 95\%$ relative humidity at $40 \pm 2^{\circ}\text{C}$ and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within $\pm 5\%$, after vibration for 1 hour. In each of three orientations at sweep vibration ($10\sim 55\sim 10\text{ Hz}$) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within $\pm 5\%$, after being dropped once with 981m/s^2 (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260°C , 10 seconds (See attached recommend reflow)
11. Storage environment: Storage condition: Temperature Range: $10^{\circ}\text{C} \sim 35^{\circ}\text{C}$ (Generally: $21^{\circ}\text{C} \sim 31^{\circ}\text{C}$) , Humidity Range: $50\% \sim 80\% \text{ RH}$ (Generally: $65\% \sim 75\%$) ; Transportation condition: Temperature Range: $-35^{\circ}\text{C} \sim 85^{\circ}\text{C}$, Humidity Range: $50\% \sim 95\% \text{ RH}$
12. Use components within 6 months. If 6 months or more have elapsed, check solderability before use.
13. Reflow profile recommend:



Lead-free heat endurance test



Lead-free the recommended reflow condition

