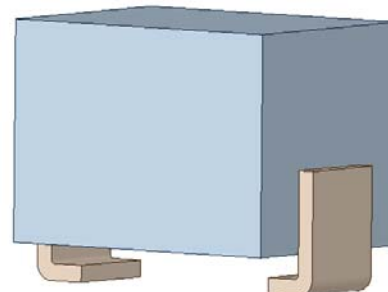


AQ10 Series

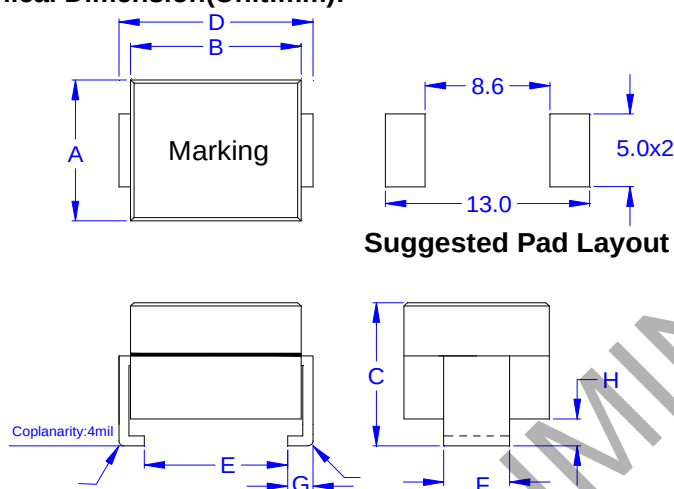


1. Features:

- Elevated Design to save board space.
- High current output chokes, up to 43 Amp with approx. 20% roll off.
- Foot Print of 12.2x8.3mm, 9.70mm Max. height .
- Perfect for high density designs with limited board space.
- Saves 50% of application board area when compared to standard design approach.
- Operating frequency up to 1.0 MHz.
- Operating Temperature Range -55°C to +130°C. RoHs & HF compliant.
- T & R Qty's: TBA pcs,13" Reel.



2. Mechanical Dimension(Unit:mm):



Type	AQ10 Series
A	8.30 Max.
B	12.0 Max.
C	See below table
D	12.5 ± 0.3
E	8.70 ± 0.1
F	4.50 ± 0.5
G	1.95 ± 0.3
H	1.50 min.

3. Electrical Specifications of AQ10A Series:

ITG Part Number	OCL (uH) ±20%	L @ Isat1 (uH) Min.	DCR (mΩ) ±10%	Isat1 (A) @25°C	Isat2 (A) @45°C	Isat3 (A) @100°C	Irms (A) @25°C	Dim. C (mm) max.
AQ10A-R33MHF	0.33	0.24	1.30	50.00	48.00	41.00	33.00	9.70
AQ10A-R40MHF	0.40	0.29	1.30	43.00	40.00	34.00	33.00	9.70
AQ10A-R47MHF	0.45	0.32	2.30	40.00	38.00	35.00	25.00	9.70
AQ10A-R60MHF	0.60	0.43	1.30	32.00	30.00	25.50	33.00	9.70
AQ10A-1R0MHF	1.00	0.72	2.30	25.00	23.00	19.00	25.00	9.70
AQ10B-1R0MHF	1.00	0.72	4.05	35.00	32.00	25.00	22.00	12.00
AQ10A-2R2MHF	2.20	1.60	6.35	17.00	16.00	13.00	15.00	9.70
AQ10A-3R3MHF	3.30	2.40	8.00	13.00	12.00	9.50	13.00	9.70
AQ10B-3R3MHF	3.30	2.40	10.20	16.00	15.00	13.00	12.00	9.70
AQ10A-4R7MHF	4.70	3.38	10.20	11.80	11.00	8.50	12.00	9.70
AQ10B-4R7MHF	4.70	3.38	12.35	13.00	12.00	10.00	10.00	9.70

Notes:

- 1> Open Circuit Inductance (OCL) test condition: 100KHz, 0.25Vrms, 0Adc, at 25°C.
- 2> L @ Isat and L @ Irms Test condition: 100KHz, 0.25Vrms, (Ta=25°C).
- 3> The nominal DCR is measured from point "a" to point "b", as shown above on the mechanical drawing, (Ta=25°C).
- 4> Isat1, Isat2 & Isat3 : DC current that will cause inductance to drop approximately by 20% ;
- 5> Irms: DC current for an approximate temperature rise of 40°C without core loss. Derating is necessary for AC currents. PCB pad layout, trace thickness and width, air-flow and proximity of other heat generating components will affect the temperature rise. It is recommended the part temperature not exceed 130°C under worst case operating conditions as verified in the end application.