

SD38 Series Low Profile, Shielded Inductors

(4) DCR limits @ 20°C.
(5) Applied Volt-Time product (V-uS) across the inductor at 100kHz necessary to

generate a core loss equal to 10% of the total losses for 40°C temperature rise. De-rating of the Irms is required to prevent excessive temperature rise.

COILTRONICS[®]

Part Number	Rated Inductance (µH)	OCL (1) +/-15% (µH)	Part Marking Designator	Irms (2) Amperes	Isat (3) Amperes	DCR (4) (Ω) Typ.	Volt (5) u-sec Typ.
SD3814-820-R	82.0	81.101	Р	0.270	0.296	2.174	32
SD3814-101-R	100.0	98.794	Q	0.228	0.268	3.048	36
SD3814-151-R	150.0	149.026	R	0.191	0.219	4.359	44
SD3814-221-R	220.0	217.342	S	0.170	0.181	5.480	53
SD3814-331-R	330.0	326.812	Т	0.136	0.148	8.59	65
SD3814-471-R	470.0	470.031	U	0.111	0.123	12.85	78
SD3814-681-R	680.0	680.320	V	0.100	0.102	15.78	94

(1) Test Parameters: 100KHz, 0.100Vrms, 0.0Adc. (2) RMS current for an approximate ΔT of 40°C without core loss. It is recommended that the temperature of the part not exceed 125°C. De-rating is necessary for AC currents.

(3) Peak current for approximately 30% rolloff at 20°C.

Mechanical Diagrams





Note A: 3 digit marking. First digit indicates inductance value per chart above. Second digit indicates bi-weekly date code. Third digit of year produced. Box indicates SD3814 part.



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Inductance Characteristics



Core Loss

Irms DERATING WITH CORE LOSS





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