# 02-659F Series From 6.8µH to 50µH



### **CHARACTERISTICS**

Description: SMD shielded power inductors

#### Features:

- Low DCR
- Ultra low buzz noise
- Frequency range up to 1.0MHz

**Applications:** D/C converters in distributed power systems, High current POL converters, Servers and Solar converters, Thin type on-board power supply module.

Operating Temperature: -40°C to +125°C

**Isat(A):** DC Current that will cause L0 to drop approximately 30%.

Irms(A): DC current that will cause an approximate  $\Delta T$  of 40°C Part Temperature (Ambient+Temp.Rise): Should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application. Miscellaneous:

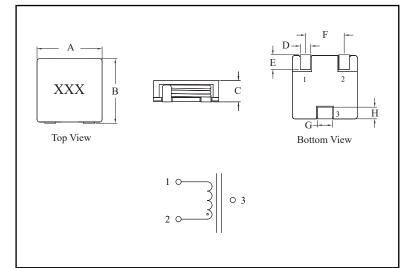
- All test data is referenced to 25°C ambient
- RoHS Compliant
- Moisture Sensitivity Level (MSL 1)
- This electronic component was designed and manufactured for use in general electronic equipment.
- Electronic components that will be used in safety-critical or high-reliability applications should be pre-evaluated by the customer.
- The component is designed and manufactured to be used within the datasheet specified values.
- Do not drop or impact components, the component may be damaged.

Samples available. See website for ordering information.

## SPECIFICATIONS

Part Number	Inductance (µH) ±20% @ 0A	Test Frequency	Ту	(A) p. @100°C	Irms (A) Typ.	DCR (mΩ) Max.
02-659F-6R8M	6.80	100kHz/0.25V	26.0	20.0	22.0	3.80
02-659F-100M	10.0	100kHz/0.25V	22.5	18.0	17.5	6.00
02-659F-150M	15.0	100kHz/0.25V	18.5	14.0	14.0	9.20
02-659F-240M	24.0	100kHz/0.25V	14.5	12.0	11.0	15.0
02-659F-320M	32.0	100kHz/0.25V	12.5	10.0	9.00	21.0
02-659F-500M	50.0	100kHz/0.25V	10.0	8.50	7.40	32.0

PHYSICAL DIMENSIONS												
Size	Α	В	С	D	E	F	G	н				
	Max.	Max.	Max.									
mm	21.7	21.5	12.5	3.0±0.3	2.0±0.15	14.5±0.5	2.5±0.15	2.4±0.15				
inches	0.854	0.846	0.492	0.118±0.012	0.079±0.006	0.571±.020	0.098±0.006	0.094±0.006				



## **RECOMMENDED PAD LAYOUT**

