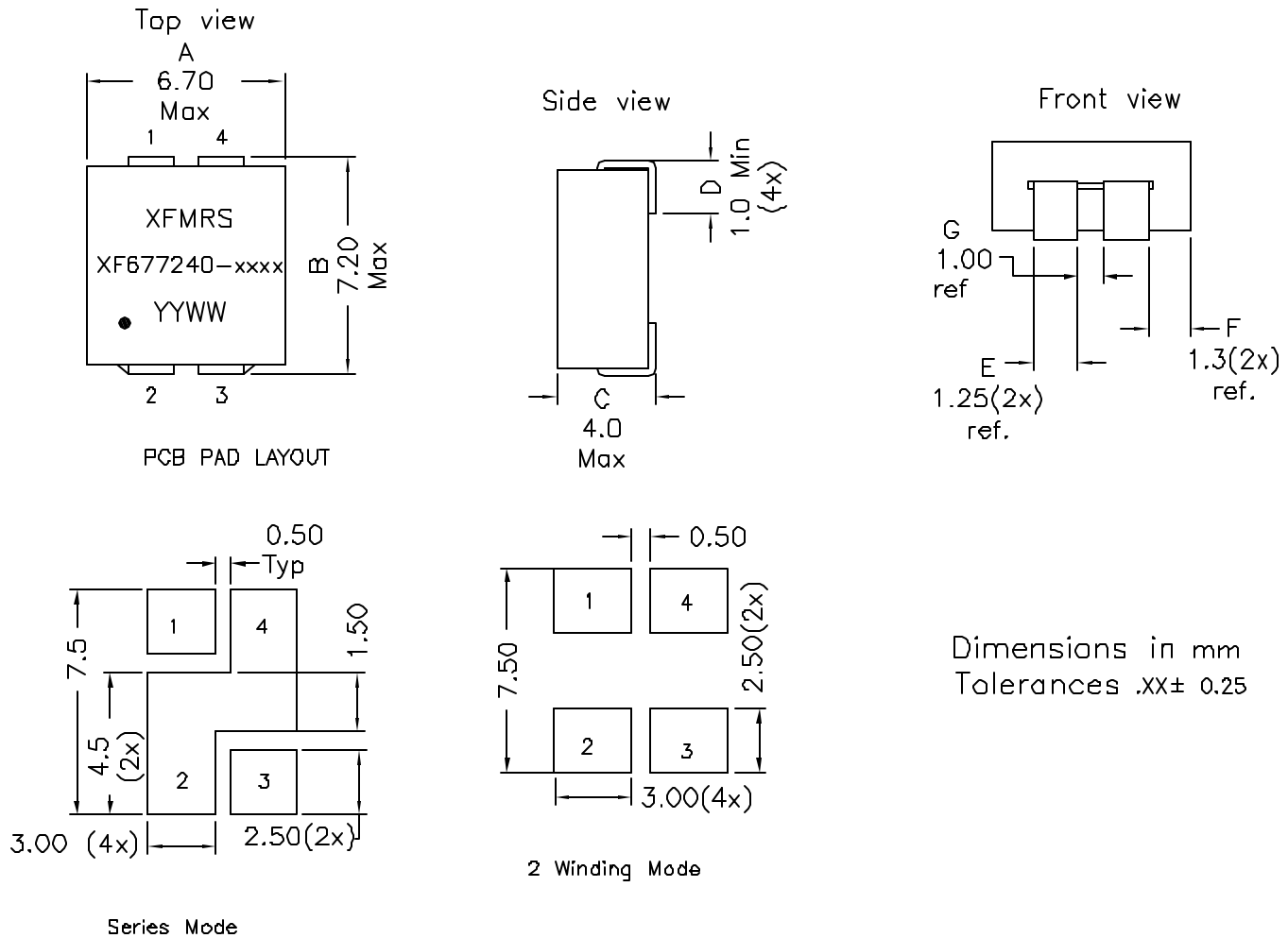


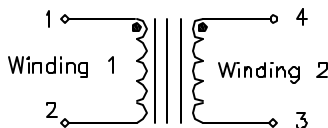
## XF677240-xxxx SERIES INDUCTORS

- \* Surface mount inductors designed for higher speed switch mode applications requiring lower inductance and high current.
- \* Dual conductors allow for low inductance and high current or high inductance and lower current.
- \* Inductance range from 0.047uH to 0.480uH
- \* Current range up to 42 Amps.
- \* Meets UL 94V-0 flammability standard.

### Mechanical Dimensions:



### Schematic:



## XF677240-xxxx SERIES INDUCTORS

### Series Mode

Part Number	Inductance $\mu$ H ref. (rated)	OCL <sup>(1)</sup> $\mu$ H ref.	I RMS <sup>(2)</sup> Amps	I STA <sup>(3)</sup> Amps	DCR <sup>(4)</sup> Ohm ref.	Height	Volt- $\mu$ Sec(V $\mu$ S) ref.(4)
XF677240-D047	0.188	0.188	16.0	21.0	0.0013	4.00	1.50
XF677240-F068	0.272	0.273	16.0	16.0	0.0013	4.00	1.50
XF677240-D082	0.328	0.328	16.0	13.0	0.0013	4.00	1.50
XF677240-D100	0.400	0.400	16.0	11.0	0.0013	4.00	1.50
XF677240-D120	0.480	0.480	16.0	9.0	0.0013	4.00	1.50

### Parallel Mode

Part Number	Inductance $\mu$ H (rated)	OCL <sup>(1)</sup> $\mu$ H $\pm$ 20%	I RMS <sup>(2)</sup> Amps	I STA <sup>(3)</sup> Amps	DCR <sup>(4)</sup> Ohm nom.	Height	Volt- $\mu$ Sec(V $\mu$ S) ref.(4)
XF677240-D047	0.047	0.047	37.0	42.0	0.00026	4.00	0.75
XF677240-F068	0.068	0.068	37.0	32.0	0.00026	4.00	0.75
XF677240-D082	0.082	0.082	37.0	26.0	0.00026	4.00	0.75
XF677240-D100	0.100	0.100	37.0	22.0	0.00026	4.00	0.75
XF677240-D120	0.120	0.120	37.0	18.0	0.00026	4.00	0.75

(1) Open Circuit Inductance Test Parameters: 1MHz, 0.25Vrms, 0.0Adc.

(2) RMS current for an approximate T of 40°C without core loss, it is recommended that the temperature of the part not exceed 125°C.

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

(4) DCR limits 20°C.

(5) Applied Volt-Time product (V- $\mu$ S) across the inductor, this value represents the applied V- $\mu$ S at 500KHz necessary to generate a core loss equal to 10% of the total losses for 40°C temperature rise.

#### Notes:

- Solderability: Leads shall meet MIL-STD-202G, Method 208H for solderability.
- Flammability: ULB4V-0
- ASTM oxygen index: > 28%
- Insulation System: Class F 155°C. UL file E151556
- Operating Temperature Range: All listed parameters are to be within tolerance from -40°C to +85°C
- Storage Temperature Range: -55°C to +125°C
- Aqueous wash compatible
- SMD Lead Coplanarity:  $\pm$ 0.004"(0.102mm)
- Electrical and mechanical specifications 100% tested
- RoHS Compliant Component