



Features :

- ◆ Ferrite drum core construction.
- ◆ Small design of only 5.8 mm maximum diameter.
- ◆ Large terminal surface for good PCB bonding.
- ◆ Moisture sensitivity Level 1.

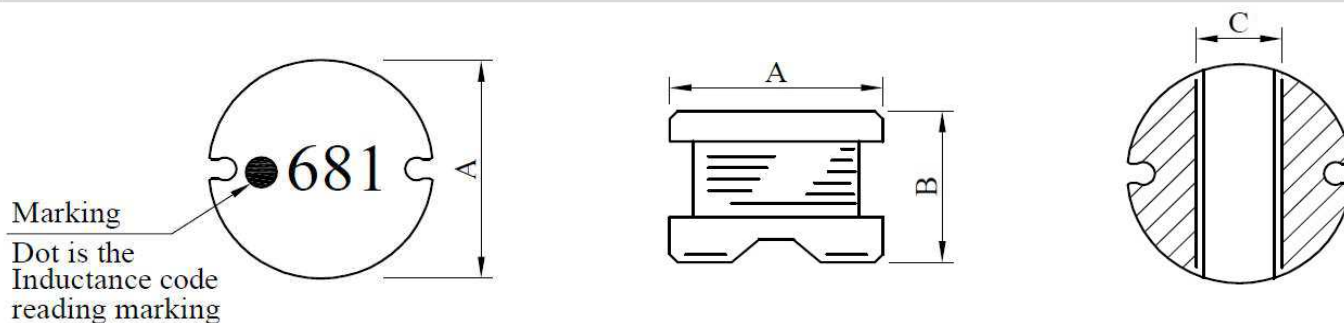
Environmental Data :

- ◆ Operating temperature: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$, (Includes self-temperature rise).
- ◆ Ambient temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$.
- ◆ Storage temperature(Component): $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$; 75% RH max.
- ◆ RoHS ,REACH compliance, Halogen free available.
- ◆ Resistance to soldering heat: 250°C for 10 secs.

Applications :

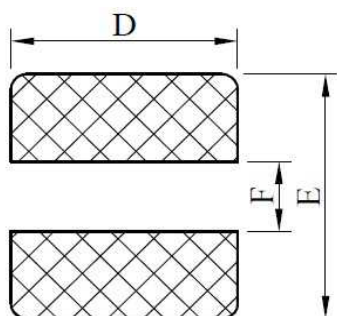
- ◆ Input / output of DC/DC converters
- ◆ Power supplies for: Portable communication equipment, Camcorders, LED TVs, Car radios

Dimensions : [mm]

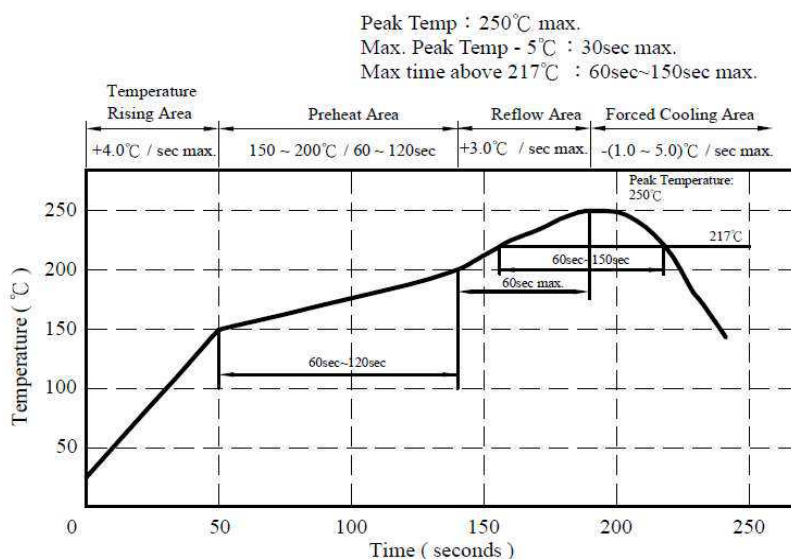


A	B	C	D	E	F
5.8 max.	4.8 max.	2.3 typ.	5.8	6	2.3

Recommended Land Pattern : [mm]



Classification reflow profile for SMT components:



Electrical Specification :

Part Number	Inductance ^① (μ H)	Q ref.	Test Frequency(Hz)		SR-Frequency ^② (MHz) typ	DC Resistance ^③ RDC (Ω) max	Isat (A) ^④ 10% drop	Irms (A) ^⑤ 40°C rise
			L	Q				
TSR0604-1R2M	1.2 $\pm$ 20%	35	100K / 1V	7.96M	155	0.02	7.30	4.20
TSR0604-1R5M	1.5 $\pm$ 20%	32	100K / 1V	7.96M	108	0.03	6.10	3.60
TSR0604-2R2M	2.2 $\pm$ 20%	33	100K / 1V	7.96M	79	0.06	5.10	2.80
TSR0604-2R7M	2.7 $\pm$ 20%	22	100K / 1V	7.96M	65	0.06	3.80	2.30
TSR0604-3R3M	3.3 $\pm$ 20%	22	100K / 1V	7.96M	60	0.07	3.50	2.00
TSR0604-3R9M	3.9 $\pm$ 20%	20	100K / 1V	7.96M	40	0.07	3.20	1.90
TSR0604-4R7M	4.7 $\pm$ 20%	20	100K / 1V	7.96M	34	0.08	3.00	1.80
TSR0604-5R6M	5.6 $\pm$ 20%	20	100K / 1V	7.96M	30	0.08	2.70	1.70
TSR0604-6R8M	6.8 $\pm$ 20%	20	100K / 1V	7.96M	28	0.12	2.50	1.60
TSR0604-8R2M	8.2 $\pm$ 20%	20	100K / 1V	7.96M	26	0.09	2.30	1.50
TSR0604-100M	10 $\pm$ 20%	30	100K / 1V	2.52M	23	0.10	2.00	1.45
TSR0604-120M	12 $\pm$ 20%	30	100K / 1V	2.52M	22	0.12	1.90	1.40
TSR0604-150L	15 $\pm$ 15%	30	100K / 1V	2.52M	20	0.14	1.60	1.30
TSR0604-180L	18 $\pm$ 15%	30	100K / 1V	2.52M	18	0.15	1.50	1.25
TSR0604-220L	22 $\pm$ 15%	30	100K / 1V	2.52M	16	0.19	1.40	1.10
TSR0604-270L	27 $\pm$ 15%	28	100K / 1V	2.52M	14	0.22	1.30	1.00
TSR0604-330K	33 $\pm$ 10%	24	100K / 1V	2.52M	13	0.25	1.10	0.88
TSR0604-390K	39 $\pm$ 10%	24	100K / 1V	2.52M	13	0.32	1.00	0.80
TSR0604-470K	47 $\pm$ 10%	22	100K / 1V	2.52M	12	0.37	1.00	0.72
TSR0604-560K	56 $\pm$ 10%	22	100K / 1V	2.52M	11	0.42	0.90	0.68
TSR0604-680K	68 $\pm$ 10%	22	100K / 1V	2.52M	10	0.52	0.84	0.62
TSR0604-820K	82 $\pm$ 10%	20	100K / 1V	2.52M	9	0.60	0.75	0.58
TSR0604-101K	100 $\pm$ 10%	20	100K / 1V	0.796M	9	0.70	0.68	0.52
TSR0604-121K	120 $\pm$ 10%	22	100K / 1V	0.796M	7	0.93	0.60	0.48
TSR0604-151K	150 $\pm$ 10%	20	100K / 1V	0.796M	6	1.10	0.54	0.40
TSR0604-181K	180 $\pm$ 10%	20	100K / 1V	0.796M	6	1.38	0.50	0.38
TSR0604-221K	220 $\pm$ 10%	20	100K / 1V	0.796M	6	1.57	0.44	0.35
TSR0604-271K	270 $\pm$ 10%	26	100K / 1V	0.796M	4	1.88	0.40	0.32
TSR0604-331K	330 $\pm$ 10%	25	100K / 1V	0.796M	3	2.25	0.36	0.27
TSR0604-391K	390 $\pm$ 10%	25	100K / 1V	0.796M	3	2.48	0.34	0.25
TSR0604-471K	470 $\pm$ 10%	25	100K / 1V	0.796M	3	3.30	0.30	0.21
TSR0604-561K	560 $\pm$ 10%	24	100K / 1V	0.252M	3	4.00	0.26	0.18
TSR0604-681K	680 $\pm$ 10%	26	100K / 1V	0.252M	2	4.65	0.25	0.16
TSR0604-821K	820 $\pm$ 10%	25	100K / 1V	0.252M	2	5.20	0.20	0.14
TSR0604-102K	1000 $\pm$ 10%	45	100K / 1V	0.252M	1.5	6.80	0.12	0.12

* Custom design are available upon requested.

1. Inductance measured at: 100kHz, 1.0Vrms, 0Adc, using an Agilent/HP4284A LCR meter or equivalent.
2. SRF measured using an Agilent/HP8753D network analyzer or equivalent.
3. Irms current : DC current that causes 40°C temperature rise from 25°C ambient.
4. Isat current : DC current at which inductance 10% drop from its value without current.
5. DC Resistance and other of electrical specifications measured at 25°C.
6. Packaging specification : Tape and Reel, it is referred to the international standard IEC60286-3:2007; 1000PCS / 13" Reel;