

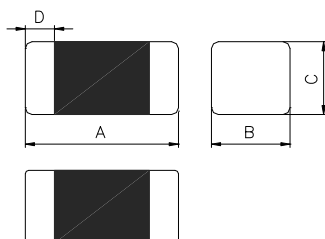
## 1. Features

1. Monolithic inorganic material construction.
2. Closed magnetic circuit avoids crosstalk.
3. S.M.T. type.
4. Suitable for reflow soldering.
5. Shapes and dimensions follow E.I.A. spec.
6. Available in various sizes.
7. Excellent solder ability and heat resistance.
8. High reliability.
9. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
10. Operating Temperature : -55~+105°C (Including self-temperature rise)



Certificate  
of  
Green Partner

## 2. Dimensions



Chip Size	
A	1.60±0.15
B	0.80±0.15
C	0.80±0.15
D	0.30±0.20

Units: mm

## 3. Part Numbering



- A: Series  
 B: Dimension  
 C: Material  
 D: Inductance  
 E: Inductance Tolerance  
 F: Category Code
- Lead Free Material  
 1R8=1.8uH  
 K=±10%,L=±15%,M=±20%

## 4. Specification

Tai-Tech Part Number	Inductance(uH)		Q		Rated Current (mA) max.	DCR (Ω) max.	SRF (MHz) min.
	Tolerance	Test Frequency (Hz)	min.	Test Frequency (MHz)			
MCI18F-47N□A	0.047	60mV / 50M	10	50	50	0.30	260
MCI18F-68N□A	0.068	60mV / 50M	10	50	50	0.30	250
MCI18F-82N□A	0.082	60mV / 50M	10	50	50	0.30	245
MCI18F-R10□A	0.10	60mV / 25M	15	25	50	0.50	240
MCI18F-R12□A	0.12	60mV / 25M	15	25	50	0.50	205
MCI18F-R15□A	0.15	60mV / 25M	15	25	50	0.60	180
MCI18F-R18□A	0.18	60mV / 25M	15	25	50	0.60	165
MCI18F-R22□A	0.22	60mV / 25M	15	25	50	0.80	150
MCI18F-R27□A	0.27	60mV / 25M	15	25	50	0.80	136
MCI18F-R33□A	0.33	60mV / 25M	15	25	35	0.85	125
MCI18F-R39□A	0.39	60mV / 25M	15	25	35	1.00	110
MCI18F-R47□A	0.47	60mV / 25M	15	25	35	1.35	105
MCI18F-R56□A	0.56	60mV / 25M	15	25	35	1.55	95
MCI18F-R68□A	0.68	60mV / 25M	15	25	35	1.70	80
MCI18F-R82□A	0.82	60mV / 25M	15	25	35	2.10	75

NOTE: □:TOLERANCE K=±10%,L=±15%,M=±20%

Tai-Tech Part Number	Inductance( $\mu$ H)		Q		Rated Current (mA) max.	DCR ( $\Omega$ ) max.	SRF (MHz) min.
	Tolerance	Test Frequency (Hz)	min.	Test Frequency (MHz)			
MCI18F-1R0□A	1.00	60mV / 10M	30	10	25	0.60	70
MCI18F-1R5□A	1.50	60mV / 10M	30	10	25	0.80	55
MCI18F-1R8□A	1.80	60mV / 10M	30	10	25	0.95	50
MCI18F-2R2□A	2.20	60mV / 10M	30	10	15	1.15	45
MCI18F-3R3□A	3.30	60mV / 10M	30	10	15	1.55	38
MCI18F-4R7□A	4.70	60mV / 10M	30	10	15	2.10	33
MCI18F-100□A	10.0	60mV / 2M	30	2	15	2.55	17

NOTE: □:TOLERANCE K=±10%,L=±15%,M=±20%  
 ● Rated current: based on temperature rise test  
 ● In compliance with EIA 595

**Q vs Frequency,DC Bias Characteristics(Typical)**

